MINNEAPOLIS CLEAN ENERGY PARTNERSHIP

2021 Annual Report

September 2022

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Net-Zero Emissions by 2050:

30% reduction since 2006; not on track for 2050 goals

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Greenhouse Gas Emissions (Municipal Operations)

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62% reduction since 2008 and on track

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Score: GREEN

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15% energy consumption reduction by 2025:
7% decrease compared to growth baseline; unknown if on track due to annual variations

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Score: YELLOW

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2% decrease compared to growth baseline; not on track

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100% of renewable electricity use by 2030:

33% in 2021 and not on track

Metric 5
Score: RED

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100% of renewable electricity use by 2022:

89% in 2021 and on track

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Score: GREEN

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10% of renewable electricity use by 2025:

7.4% in 2021 and on track

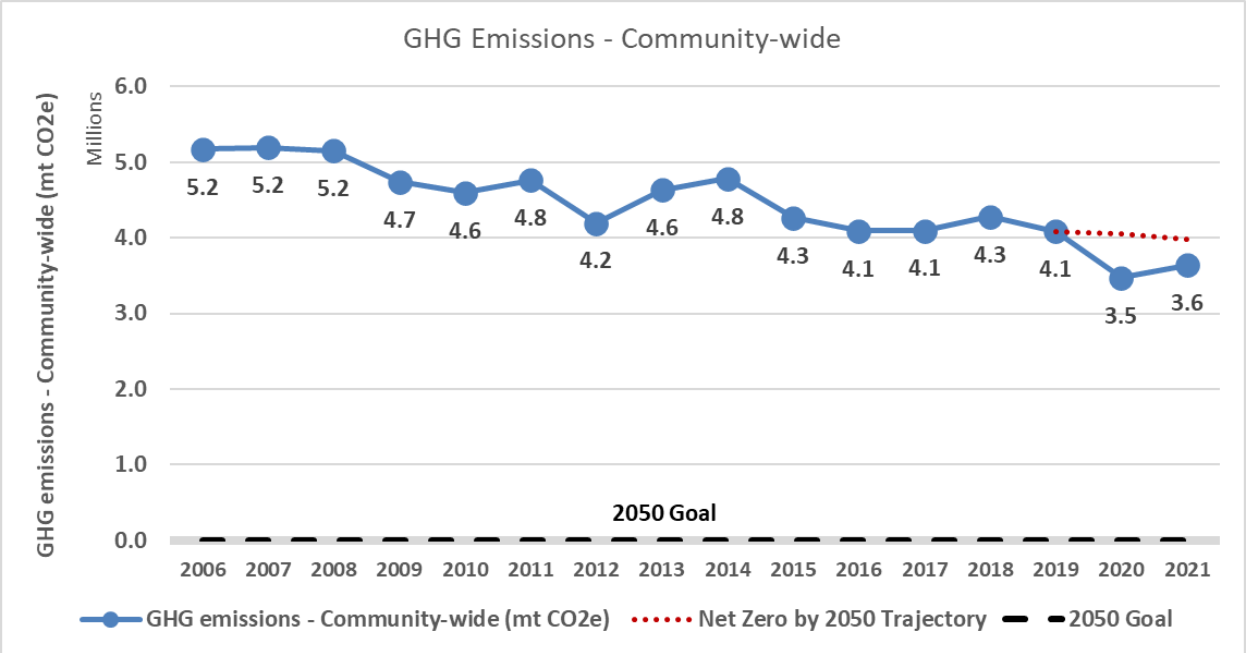
Metric 7
Score: GREEN

Metric 1: Greenhouse Gas Emissions (Community-wide)

This metric measures progress toward the Minneapolis *Race to Zero* overarching community-wide greenhouse gas (GHG) reduction commitment:

> *Achieve net zero carbon emissions by 2050 and decarbonize within a carbon budget defined by a science-based, fair share pathway.*

The following data show a 30% decrease in 2021 emissions compared to 2006. While 2021 emissions are within the bounds of the City's net zero by 2050 pathway, forecasts (see appendix) indicate the City's carbon budget will be exhausted well before 2050 at the recent rate of decarbonization. Therefore, this metric is not on track to meet the 2050 goal.



GHG emissions reductions to date are in large part attributed to progress on electricity decarbonization, moving away from coal to natural gas, wind, and solar power to produce electricity. For a fifth consecutive year, natural gas is the largest source of GHG emissions in Minneapolis. In 2021, natural gas was the largest emissions source at 42% of overall GHG emissions, followed by electricity (28%) and on-road transportation (24%).

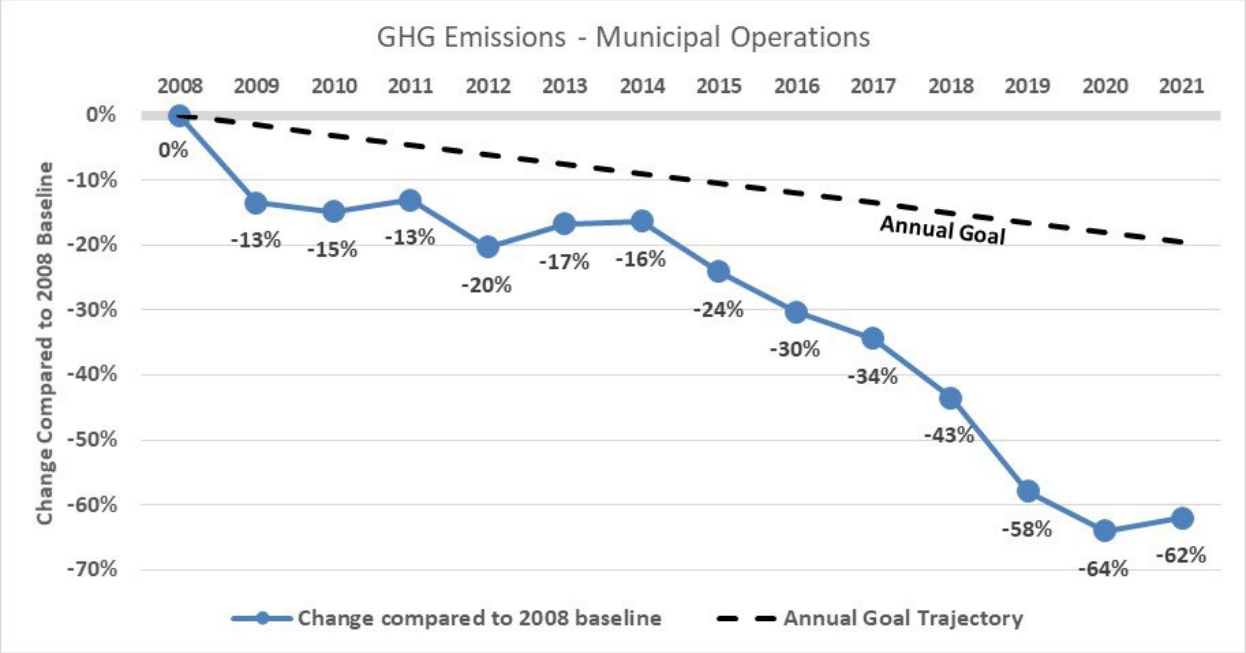
Traffic volume in 2021 rebounded up 10% and electricity use up 5% from 2020 levels, after respectively being down 20% and 5% in the first year of the pandemic. Lasting impacts from the pandemic will continue to be monitored.

Metric 2: Greenhouse Gas Emissions (Municipal Operations)

This metric measures progress toward the Minneapolis Climate Action Plan's municipal operations greenhouse gas reduction goal (CAP Buildings & Energy Goal #4):

> *Achieve a 1.5% annual reduction in greenhouse gas emissions from municipal operations.*

The following data show a 62% decrease in emissions in 2021 compared to 2008. The data trend indicates this metric is on track to meet the City's adopted goal.



Greenhouse gas emissions from City facilities and operations continue to decrease, which is primarily the result of reductions in emissions from electricity. The reductions in electricity emissions are the result of the reduced carbon intensity of the electric grid paired with City subscriptions in community solar gardens and Xcel Energy's *Renewable*Connect* green tariff program. Additionally, City municipal operations have realized a 21% overall decrease in energy consumption since the 2008 baseline year. Electricity emissions increased slightly in 2021 compared to 2020 due to a higher grid emissions factor from Xcel Energy, even though electricity consumption remained relatively constant. The increased emissions factor is expected to be a transient phenomenon and is not reflective of any change in the long-term trend of emissions reductions from electricity generation.

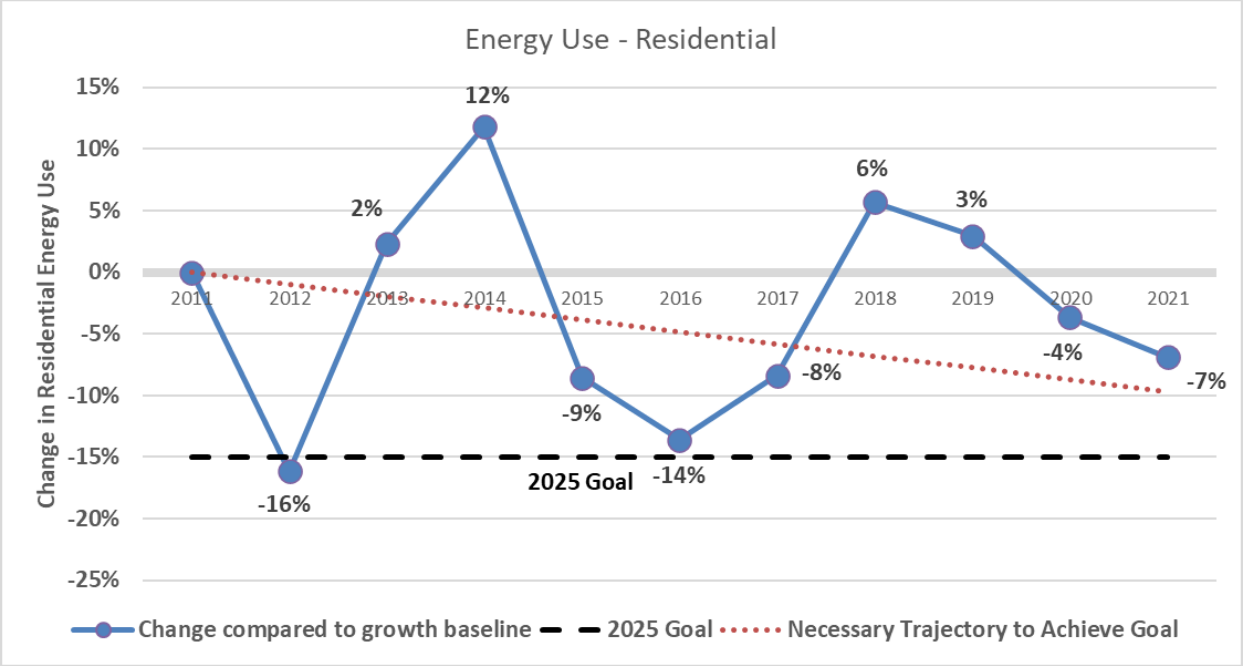
Emissions from natural gas consumption have remained relatively constant since 2008 and require further action to reduce.

Metric 3: Energy Use (Residential)

This metric measures progress toward the Minneapolis Climate Action Plan's residential energy reduction goal (CAP Buildings & Energy Goal #1):

> *Achieve 15% energy efficiency in residential buildings from the growth baseline by 2025.*

The following data show a 7% decrease in residential energy use in 2021 compared to the growth baseline; actual use has decreased 6% since 2011. The data exhibit significant year-to-year variation (caused in large part by weather); therefore, it is unknown if this metric is on track to meet the City's adopted goal.



The residential energy sector consists of approximately 187,000 electric and 126,000 gas customers in Minneapolis. The number of electric and natural gas customers has increased in the last decade, but data suggests that households in Minneapolis are using energy more efficiently. However, the reliance on natural gas for space heating in cold weather continues to contribute to significant peaks of energy use in cold weather years (see graph years 2014, 2018, and 2019).

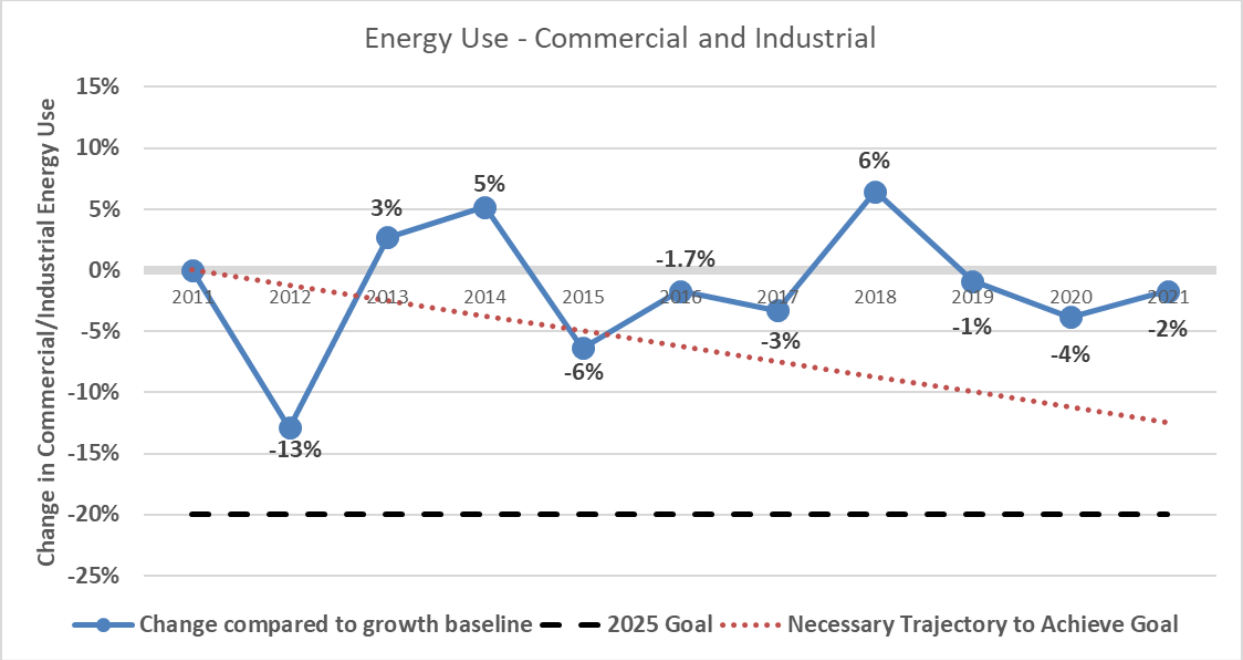
Partnership Activity EE.1 has the Partners collaborating on data-driven strategies to reduce natural gas emissions in the residential sector, especially for customers living in the City's Green Zones. Partnership Activity EE.5 resulted in new and enhanced utility tools to help implement the City's energy data disclosure policies. Partnership Activity IF.1 aims to provide residential customers with an inclusive financing option.

Metric 4: Energy Use (Commercial and Industrial)

This metric measures progress toward the Minneapolis Climate Action Plan's commercial and industrial energy reduction goal (CAP Buildings & Energy Goal #2):

> *Achieve 20% energy efficiency in commercial/industrial buildings from the growth baseline by 2025.*

The following data show a 2% decrease in commercial/industrial energy use in 2021 compared to the growth baseline; actual use is the same as 2011. The data trend indicates this metric is not on track to meet the City's adopted goal.



The commercial and industrial energy sector consists of approximately 19,000 electric and 11,000 gas customers in Minneapolis. Since 2011, the number of electric and natural gas customers has increased (20% and 4% respectively) while electricity use declined 18% and gas use increased 9%. The decreased electric usage while still increasing customer count has a direct correlation to Xcel Energy's successful customer engagement in commercial energy efficiency programs. While less affected by weather trends than the residential sector, emissions from natural gas represent 57% of the emissions in this sector.

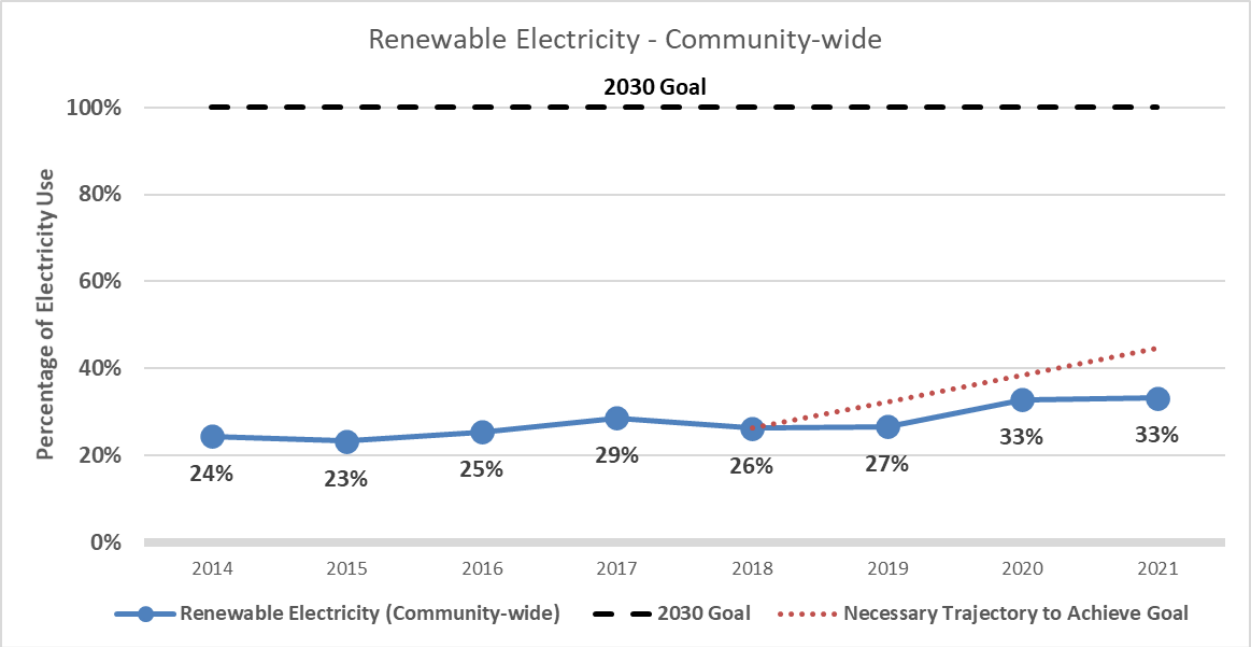
Partnership Activity EE.2 had the Partners teaming up to address energy consumption in the City's most energy intensive commercial buildings. For the second year in 2021, due to the City of Minneapolis and other parties' interest, CenterPoint Energy and Xcel Energy began to coordinate delivery of their respective commercial-scale energy audit programs to make it easier for commercial customers to identify opportunities to address each energy source.

Metric 5: Renewable Electricity (Community-wide)

This metric measures progress toward the Minneapolis community-wide renewable electricity goal:

> *Receive 100% of community-wide electricity use from renewable sources by 2030.*

The following data show that 33% of electricity consumption came from renewable sources in 2021. The data trend indicates this metric is not on track to meet the City's adopted goal, which was established in 2018.



The data shown above indicate that the community's renewable electricity percentage was flat in 2021 after increasing noticeably in 2020. The data show that this metric, while generally improving, is not at the pace required to meet the 100% goal by 2030, thus this metric is determined to not be on track.

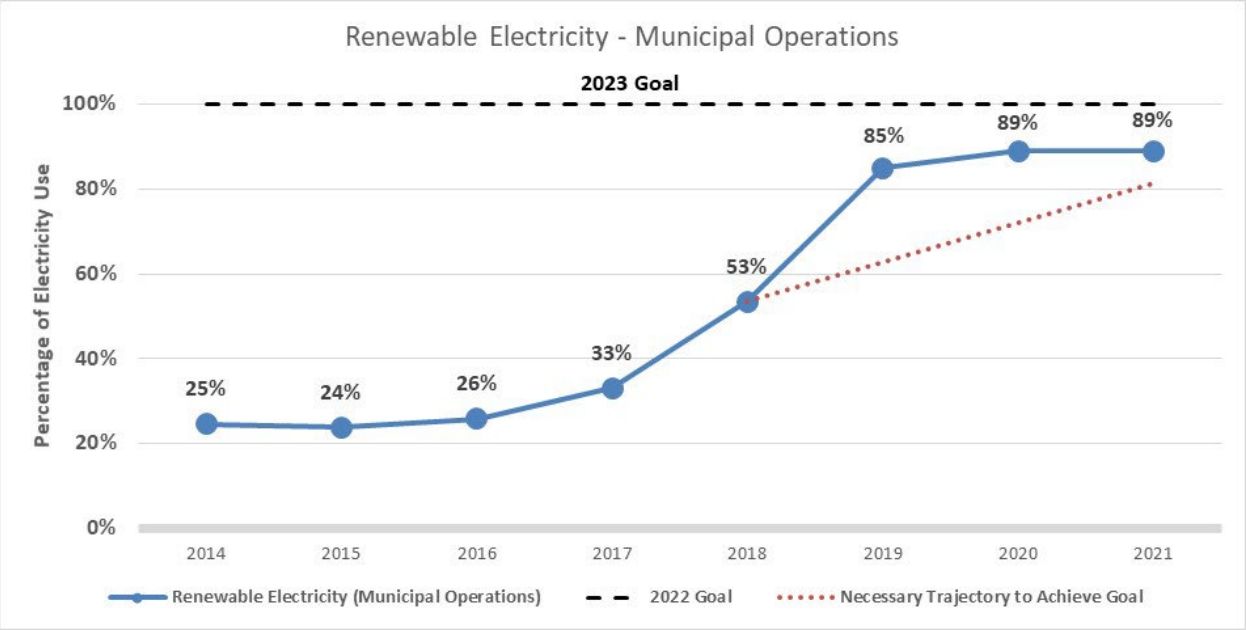
The Xcel Energy renewable electricity grid mix has increased from 32% to 33% since 2020. Xcel Energy also provides another metric, the Certified Renewable Percentage, which is 34.3% for 2021. The Certified Renewable Percentage reflects the portion of electricity delivered to customers for which Renewable Energy Certificates (RECs) have been retired on behalf of all customers. Subscription consumption amounts in 2021 modestly increased in Xcel Energy's green tariffed Renewable*Connect, Windsource, and community solar garden programs, after more significant increases in 2020. Xcel Energy's approved Integrated Resource Plan projects that by 2030 about 55% of its generated electricity will come from renewable energy.

Metric 6: Renewable Electricity (Municipal Operations)

This metric measures progress toward the Minneapolis municipal operations renewable electricity goal:

> *Reach 100% renewable electricity for municipal facilities and operations by 2022*

The following data show that 89% of electricity consumption came from renewable sources in 2021. The data trend back to 2014 indicates this metric is on track to meet the City's adopted goal.



The share of renewable electricity consumed by the City's municipal operations began to increase starting in 2017. Dramatic increases in 2018 and 2019 were due to the City's increased participation in Xcel Energy's community solar garden (19 million kWh in 2021) and *Renewable*Connect* (52 million kWh in 2021) programs. Electricity consumption from municipal operations declined 19% from 2014 to 2020 (leveling off in 2021), making it easier to achieve the renewable electricity goal.

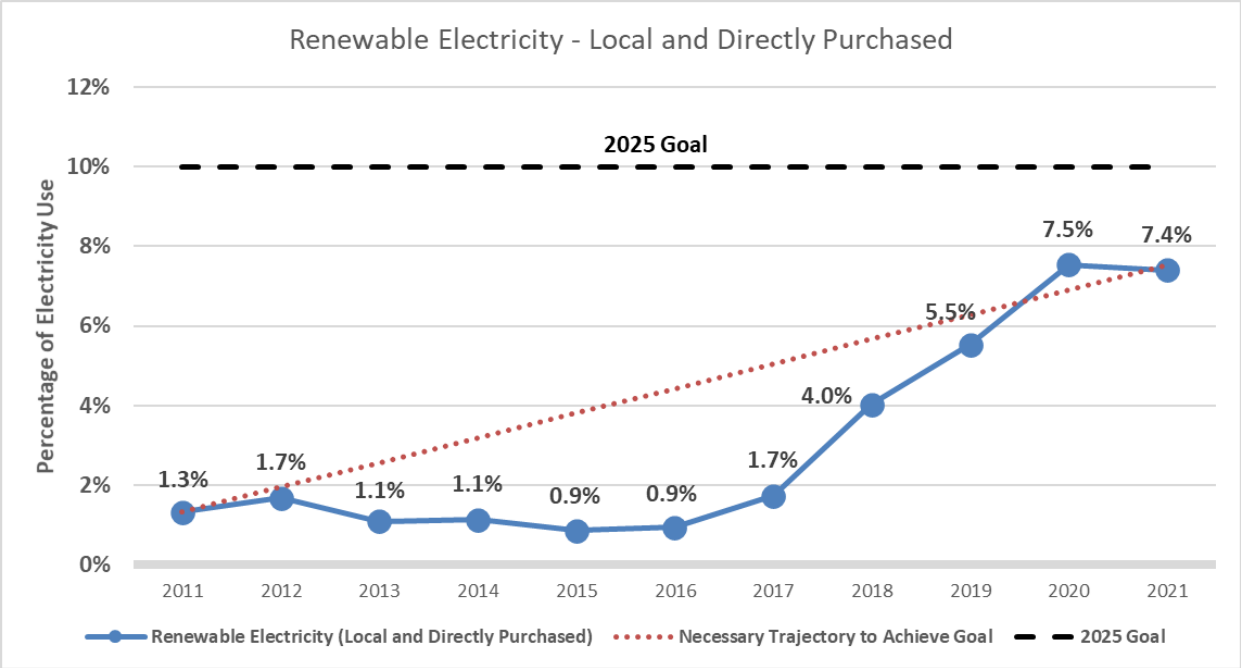
Looking to 2022, community solar gardens subscriptions will increase again. Also, the City is in the process of implementing on-site solar generation that will get the City even closer to the 100% goal.

Metric 7: Renewable Electricity (Local and Directly Purchased)

This metric measures progress toward the Minneapolis Climate Action Plan's renewable electricity goal (CAP Buildings & Energy Goal #3):

> *Increase electricity from local and directly purchased renewables to 10% of the total consumed by 2025.*

The following data show that 7.4% of electricity consumption came from local and directly purchased renewable sources in 2021. Due to recent improvements and disregarding pandemic-influenced 2020 anomalies, this metric is on track to meet the City's adopted goal.



2017, 2018, 2019, and 2020 showed dramatic upticks in local and directly purchased renewable electricity. Increases were due to continued large direct-purchase subscriptions in Xcel Energy's *Renewable*Connect* program, and a surge in local renewables through both Xcel Energy's community solar garden program and new Minneapolis-sited arrays supported by the City's Green Cost Share program.

A portion of the metric increase in 2020 was the result of electricity consumption citywide declining over 5% due to impacts from the pandemic, while renewable production increased. Electricity consumption citywide in 2021 rebounded back to almost pre-pandemic levels, which resulted in a drop in this metric in 2021 despite production growth of almost 5% since the previous year.

2019-2021 Work Plan Progress

Progress to Date (September 2022)
EE.1 REDUCE NATURAL GAS USE FOR RESIDENTIAL CUSTOMERS EE.1 aimed to double residential participation in building envelope and high-efficiency equipment programs across the City. EE.1 proposed to use data-driven strategies to identify and engage customers with high energy savings potential with a specific focus on the City's Green Zones. In 2020, CenterPoint Energy and its vendor, ILLUME, made refinements to the Community Data Profile Dashboard based on EVAC feedback. CenterPoint Energy engaged with additional stakeholders, including Home Energy Squad vendor, Center for Energy and Environment, and other community stakeholders, like the Cities of Bloomington, Saint Louis Park and Minneapolis' Prospect Park Association, in using the Dashboard to deploy targeted engagement strategies and track progress toward goals. CenterPoint Energy and ILLUME prepared a Minneapolis specific Dashboard analysis to inform the development of targeted outreach strategies in 2021. CenterPoint Energy is testing an Air Sealing and Insulation Program marketing campaign in early Q4 2022 in census tracts that have higher energy use, lower CIP participation, and lower income levels. In 2021 CenterPoint Energy engaged with the City of Minneapolis, the Department of Commerce, and others in an approach that created specific messaging to help customers behind on their bills access payment assistance resources. The communications plan was developed to walk customers through the steps in the assistance journey and also included customers within higher-than-normal bills, to try and help them before they fell behind. To address the upfront cost barrier of home insulation projects, CenterPoint Energy launched Instant Rebates for its Air Sealing and Insulation Program. In 2021, CenterPoint Energy trained eight rebate eligible installers (REIs) on the Instant Rebate offering. Four REIs agreed to offer the Instant Rebate option. In Q2 2021, CenterPoint Energy contracted with a third-party evaluator to assess opportunities to improve the Instant Rebate offering from the perspective of Rebate Eligible Installers (REIs) that use the program. Through interviews with participating and non-participating REIs, the third-party evaluator found that additional training sessions on how to process Instant Rebates may help REIs feel more confident in offering the Instant Rebate themselves. As a result, the Company provided an Instant Rebate online training session in Q3 2021. A new group of seven REIs agreed to offer Instant Rebates. CenterPoint Energy updated its program webpage to denote REIs offering Instant Rebates and promoted through inserts in residents' bills. In 2021, 52 Instant Rebates were completed from four REIs, with 10 within the City of Minneapolis submitted by a single REI. While finalized data for 2022 won't be available until next year's report, estimates through Q3 2022 show more than 40 Instant Rebates have been

Progress to Date (September 2022)
completed by six REIs with a third of them in the City of Minneapolis by four REIs. CenterPoint Energy expects this number to increase through yearend. The Instant Rebate option will continue to be offered in the future. This activity has been closed out.

EE.2 REDUCE ENERGY USE FOR HIGH ENERGY SAVING POTENTIAL COMMERCIAL CUSTOMERS

EE.2 had the Partners coordinating on engaging commercial buildings with high energy use and energy use intensity.

Xcel Energy's original intent for this initiative was to utilize a new vendor software that streamlines the process of compiling customer building type, usage, and historical DSM participation to efficiently direct utility staff and customers on the best path forward to maximize energy conservation through the most appropriate program(s). Additionally, Xcel Energy planned to pilot this by cross referencing the City's list of benchmarked buildings to identify the bottom performing 25% - thereby identifying those buildings with the most energy savings potential.

Xcel Energy and its vendor could not come to a financial agreement on terms and therefore did not sign a contract for the pilot. Instead, Xcel Energy used its current method of manually assessing each customer and building individually to determine the best path forward. CenterPoint Energy performed an analysis on the same customers and the utilities met with the City to provide an update. Soon afterwards, the COVID-19 pandemic broke out and had significant impacts on the customers identified for this effort, many of which were large hotels and office buildings.

Xcel Energy monitored and re-assessed the situation twice during the pandemic. The remaining buildings on the list are partially occupied, if at all, because they are office buildings. These buildings generally are not moving forward with any capital projects and are waiting to see how their buildings fill following the pandemic; the Delta variant has further delayed the return-to-office plans for many of these buildings.

In a related effort, the Utilities began a joint commercial energy audit process and completed 36 audits in 2021, of which 15 were for Minneapolis customers; none of these were in the bottom performing 25% of benchmarked buildings.

Additionally, for commercial customers, CenterPoint Energy launched REBUILD in August 2020 offering no-cost energy consultations and increased energy efficiency incentives to customers impacted by civil unrest that occurred in 2020. CenterPoint Energy extended the enrollment deadline from the end of 2020 to the end of 2021 as well as extending the deadline to install qualifying to July 1, 2022. Sixty customers have enrolled, and 7 no-cost Natural Gas Energy Analyses have been conducted, sixteen triple rebates valued at $140,000 and 9,229

Progress to Date (September 2022)
Dth savings have been paid to twelve customers, with an estimated additional $3,500 in triple rebates for another 95 Dths expected to be included when REBUILD finalizes with the 2022 reporting Xcel Energy launched a similar program in June 2020 called Recovery Rebates for customers impacted by civil unrest that offered no cost consultations and up to double rebates. Approximately 75 customers enrolled in the program: including grocery and convenience stores, retail, restaurants, multi-family and offices. Approximately one-third of the customers sustained extensive damage or complete destruction to their facilities; those projects are enrolled in the Energy Efficient Buildings program. The remaining customers are enrolled in the Commercial Streamlined Assessment (formerly known as Turn Key) program. Approximately half of the projects are still in process with some of the construction projects not expected to be completed until 2024. Many of these projects will include rebates for installing energy efficient lighting, new HVAC (heating and cooling) equipment, refrigeration, and commercial cooking equipment. This activity has been closed out.
EE.3 PURSUE ENERGY EFFICIENCY "PERFORMANCE PATH" AT CITY FACILITIES EE.3 aimed to improve energy efficiency in City facilities. Xcel Energy developed a pilot program to test with the City of Minneapolis in their facilities. This program is designed to incentivize higher levels of customer engagement in energy efficiency with higher levels of utility engagement through assessments/studies and rebates. Xcel Energy has been working with the City's Energy Manager to help achieve a pilot goal of 10% electricity use reduction in City facilities. As part of this pilot, additional building needs assessments were completed and found minimal new opportunities beyond previous work the Partners have done together, which had included building needs assessments, lighting upgrades, HVAC system upgrades, and street lighting LED conversion. Building Operator Certification (BOC) training for City employees is currently being explored. The City's Energy Manager may in the future determine if BOC training is prudent for City facilities staff. If the City decides to participate, Xcel Energy will schedule specialized BOC training as requested by the City. CenterPoint Energy conducted site visits to evaluate over 70 gas meters at City facilities for possible upgrades for automated daily meter reads. City Facilities staff reviewed the information on meter upgrade potential and costs and has decided not to proceed with upgrades to the evaluated meters at the City's expense. This activity has been closed out.

Progress to Date (September 2022)

EE.4 FIELD TEST ENERGY EFFICIENCY AND CARBON CAPTURE TECHNOLOGY

EE.4 aims to pilot energy efficiency and carbon capture technology, called CARBiNX at commercial facilities in Minneapolis and surrounding suburbs.

In 2020, the CARBiNX pilot experienced delays due to permitting challenges and COVID-19. While permitting the CARBiNX unit is permissible under current law, permitting is at the discretion of building code officials who are not familiar with the technology and have to prioritize more standard projects. Therefore, CenterPoint Energy and the makers of CARBiNX, CleanO_2 Technology, have had to invest more time and resources than expected into municipal code official engagement. A virtual meeting was held in late June 2020, to provide a demonstration of the technology and determine permitting criteria and procedures with code officials. The pilot also experienced several months of delays as code officials and project partners focused on other work related to adjusting to COVID-19.

CenterPoint Energy engaged in productive meetings with the Minnesota Department of Labor and Industry regarding the permitting process. In April 2021, the Minnesota Department of Labor and Industry approved the permitting to install the first CARBiNX unit in Minnesota. To date, one CARBiNX unit has been installed and is operating in a commercial building in Elk River with opportunities for ten future installations funded by CenterPoint Energy. Of the potential future installations, potentially three are in Minneapolis, including a City of Minneapolis facility. CleanO2 Carbon Capture Technologies obtained UL listing as a heat recovery unit which helped with permitting approvals.

This project continues to be pursued and explored by CenterPoint Energy and the City of Minneapolis.

EE.5 SUPPORT RESIDENTIAL ENERGY DISCLOSURE POLICIES BY MAKING DATA ACCESSIBLE WITH TOOLS

EE.5 proposes new and enhanced utility data access tools to support implementation of the City's energy disclosure policies.

The Minnesota Public Utilities Commission (PUC) issued an order on Nov 20, 2020 for DOCKET NO. E,G-999/M-19-505, establishing a data aggregation standard, which states that utilities must provide aggregated customer energy use data sets to third parties, such as the City and property owners. These data sets may include data from no fewer than 4 customers and that a single customer's energy use must not constitute more than 50 percent of total energy consumption for the requested data set (the "4/50 rule"). Due to this Commission Order, the Partners have established two parallel paths for roll-out of the Time-of-rent energy cost disclosure ordinance based on building size (1-4 and 5+ unit properties), with weekly meetings, alternating between the two.

Progress to Date (September 2022)
5+ unit Properties CenterPoint Energy and Xcel Energy both contracted with Accelerated Innovation (AI) to create energy report tools for the City's ordinance. CenterPoint Energy and AI modified existing benchmarking tool for Time of Rent compliance. For consistency in the customer experience, Xcel Energy also contracted with AI to develop their tool that allows building owners to comply with the City's Time of Rent ordinance. CenterPoint Energy, Xcel Energy, Minneapolis and AI meet biweekly to align tool pages to allow for a consistent and easier to understand view from a customer perspective. To develop help resources and test the utilities' software tools, the Partners worked with the Minnesota Multi Housing Association (MHA) to gather interested property owners to test the tools and provide feedback directly to the Partners about their experience. The webtools for each utility were completed and functional by September 1, which represented the beginning of City outreach to rental license holders and property owners. To assist in the usage of these tools, "quick start" user guides were developed to assist property owners in using the utilities' data tools specifically for compliance with the City's ordinance. These guides provide the steps property owners will need to follow to create and share with tenants an energy cost report for their building. The Partners also developed other helpful resources for property owners, including FAQs, short videos illustrating the software tool registration steps, the City's 311 call line for helping owners find guidance on the FAQ and common issues, and dedicated utility-specific help email addresses for property owner assistance on technical or account-related issues. Property owners began receiving notifications from the City on the ordinance's effective date of September 1 encouraging them to begin creating energy costs reports and guiding them to the tools and help resources developed by the Partners. Subsequent rounds of notifications had been sent by the City, with attention then turning to the launch of a renter awareness campaign in November 2021. Awareness campaigns and outreach continued into 2022 for both property owners and renters. 1-4 Unit Properties For properties with less than 4 units that cannot be adequately aggregated or annonymized, the PUC requires customer consent before releasing whole building energy use data to third parties, such as property owners. As part of the PUC docket previously discussed, on March 1, 2021, Xcel Energy and CenterPoint Energy submitted annual compliance filings, which included a discussion about which, if any, additional use cases the Commission should consider. In its March 1 filing (Docket No. E,G-999/M-19-505), CenterPoint Energy requested that the Commission consider how CEUD consent requirements should apply when landlords of 1-4 unit properties in the City of Minneapolis request tenant customer energy use data (CEUD) in compliance with the City's ordinance. In Xcel Energy's March 1 filing (Docket No. E,G 999/M-19-505), Xcel Energy stated: "We are aware that a number of communities are implementing benchmarking ordinances that in some cases apply to all sizes of rental properties including single-tenant buildings. The Commission may want to specifically

Progress to Date (September 2022)
examine the 4/50 aggregation standard for the building benchmarking Use Case in light of emerging benchmarking ordinances." On October 29th, the Utilities filed a Petition with the Public Utilities Commission (Commission) for approval of a process to release whole building data to facilitate local residential rental ordinance compliance, Docket Number G008/M-21-761. The petition also included a letter of support from the City. The Commission met on March 10 and heard testimony by the Utilities and the City in support of the confidence interval data methodology that they proposed. The Commission issued its Order April 13 approving the petition with the addition of modifications supported by the Utilities and the City. The Utilities and the City convened regular implementation meetings starting in May 2021 with the intent of launching 1-4 unit property data access. On July 8, 2022, the City compiled a 2021 rental license address list and sent it to utilities for matching with their meter data. By August 26, 2022, the City had received back the rental license address list with each utility's confidence interval data included when matching was possible (approximately 90% successful match rate). The City is currently in the process of integrating the CI energy data into a public dashboard for renters to use when considering rental property options. Next steps will include testing the public dashboard design with focus groups and then a larger-scale launch anticipated in Q4 2022. This project continues to be pursued and explored by the City of Minneapolis, CenterPoint Energy, and Xcel Energy.
RE.1 INSTALL ELECTRIC VEHICLE INFRASTRUCTURE FOR CITY FLEET RE.1 spurs the transition to an electric vehicle fleet for the City of Minneapolis. Charging installations are nearly complete at the City's Aldrich facility and Currie Maintenance facility. Chargers will be fully installed and energized this spring, adding eight level 2 chargers and one DC fast charger to the city's fleet electric vehicle charging infrastructure. An additional six level 2 chargers will be installed at the City's Aldrich facility this fall. Xcel Energy and the City continue to work on the technical details for charging infrastructure at the Federal Court Ramp. This project continues to be pursued and explored by Xcel Energy and the City of Minneapolis.
RE.2 ACHIEVE 100% RENEWABLE ELECTRICITY FOR CITY ENTERPRISE AND COMMUNITY PATHWAY RE. 2 creates a pathway to the City's 100% renewable electricity goal.

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In 2019 the City issued a Request for Information (RFI) to meet its 100% renewable electricity goal for both city enterprise by 2023 and communitywide by 2030. The City received 16 responses, including one from Xcel Energy. The City and Xcel Energy met multiple times to discuss potential renewable options the City is interested in. A review committee consisting of City staff from Property Services, the Sustainability Division, Councilmember aides, and the Mayor's office reviewed the RFI submissions and used the ideas to develop two Request for Proposals (RFP) for the 2023-and-beyond renewable electric resource: 1. An RFP requesting 90% of the City's municipal operations needs to be met by a large generation source located outside the City limits. 2. An RFP requesting 10% of the City's municipal operations needs to be met by one or more generation sources located within City limits. In March 2021, a total of seven proposals were received for the RFP requesting 8 million annual kWh from renewable resources located inside the City limits, ranging from outright purchase of solar arrays on City buildings, REC contracts, and Power Purchase Agreements (PPA) for electricity generated by solar arrays located on City owned buildings. The City decided to pursue PPA proposals that would save money and require no capital expenditures. After careful review of the three PPA proposals received, the proposal from Sundial Solar was selected to best meet the city objectives. In September 2021, City Council granted permission for staff to execute a contract with Sundial Solar for the arrays to be built on City owned facilities for total of 5.1 million annual kWh. The City is currently in the process of document execution and building the first tranche of sites (Police Precinct 5, Water Department – Columbia Heights Campus, EOTF, Currie Maintenance, and Lowry Warehouse). The City is continuing to work with Sundial to scope out and build another round of sites as part of this RFP. The City is also reviewing the implication of the Inflation Reduction Act to make the best guided decisions for solar investment going forward. The City's ability to take the 30% ITC as a non-profit may influence how the City proceeds going forward. A total of eight proposals were received for the RFP requesting 80 million annual kWh from renewable resources located outside the City limits, ranging from REC contracts, Special Contracts, and Virtual Power Purchase Agreements (VPPA) for electricity generated by solar arrays located outside of the City limits. The City has been working with US Solar under an exclusive agreement for a REC contract at a proposed fixed price of $0.003/kWh, after US Solar was selected as the highest-scored proposal amongst eight received. US Solar's proposal is to build 8 to 20 solar arrays that vary between 5-10 MW each within adjacent counties to the 7 county-metro area and sell the generated electricity directly to Xcel Energy or another power off-taker. The renewable energy generated from these US Solar arrays would allow the City of Minneapolis to claim that approximately 90% of its Municipal operations are powered by renewable electricity via REC ownership. The City anticipates needing to partner with Xcel Energy to bring to fruition this concept and has begun engagement with Xcel Energy. As the

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City brings to fruition projects in partnership with Sundial Solar and US Solar, the City will wind down current Renewable*Connect contracts. This project continues to be pursued and explored by the City of Minneapolis and Xcel Energy.
RE.3 PROVIDE SOLAR GARDEN AND ENERGY EFFICIENCY OPPORTUNITIES FOR LOW-INCOME COMMUNITIES RE.3 aims to establish a low-income community solar garden. Xcel Energy submitted the adjusted Renewable Development Fund (RDF) grant contract to the Public Utilities Commission (PUC) that would alter the timeline per the request of the grantee and establish the final grant amount. That request was approved at the PUC in July 2021. Xcel Energy has submitted the compliance filing with the grantee that provides additional solar garden detail. Subscribers and participants in the energy efficiency roll-out plan may be identified through the City's 4D program. Xcel Energy will work with the City on the income qualified energy efficiency engagement at the appropriate build stage of the community solar garden. In July of 2021, Xcel Energy received approval from the Commission for the adjusted Renewable Development Fund (RDF) grant contract from the Public Utilities Commission (PUC) that alters the timeline per the request of the grantee and establish the final grant amount. Xcel Energy has submitted the compliance filing with the grantee that provides additional solar garden detail. Subscribers and participants in the energy efficiency roll-out plan may be identified through the City's 4D program. Xcel Energy will work with the City on the income qualified energy efficiency engagement at the appropriate build stage of the community solar garden. The entire solar industry is facing significant supply chain challenges, but Xcel Energy is still working to move this project forward as soon as possible. This project continues to be pursued and explored by Xcel Energy and the City of Minneapolis.
WD.1 IMPROVE EQUITABLE ACCESS TO CLEAN ENERGY JOBS WD.1 aims to build the Partner's collective understanding of the obstacles and opportunities of achieving a diverse clean energy workforce. Xcel Energy has submitted a proposal to the PUC for a $4 million workforce development program aimed at helping Black Indigenous People of Color (BIPOC) find training and energy related careers. Xcel Energy met with local organizations and the unions – as well as the City - that offer such programs to determine what should be included in our RFP and program structure.

Progress to Date (September 2022)
Additionally, Xcel Energy filed and received approval of a CIP modification to work with the Center for Energy and Environment (CEE) on a $5.7M proposed energy efficiency workforce training program that will be focused on engaging participants in areas of concentrated poverty, providing training in energy efficiency skills such as energy audits, insulation installation, assisting participants with job placement, or establishing their own business. The program also includes a scholarship fund to assist income qualified students at two- and four-year institutions pursuing careers in energy efficiency. Xcel Energy intends to partner with workforce development experts, community leaders and companies from the region that would eventually hire the CIP-WDE participants. The first cohort of the program kicked off on March 28, 2022 with 92% of the training participants from income-eligible households and 100% identifying as Black, Indigenous, Latinx, Asian or a person of color. The Workforce Training Manager has been instructing and engaging participants daily in building science and sharing more about his career journey in energy auditing. Community leaders spoke with participants about their experiences getting into solar and clean energy careers, the energy efficiency industry in Minnesota, and the many career paths they can take in addition to energy auditing and insulation, including solar installation. Xcel Energy and City have worked together on employment communications and outreach, including newsletters and job fairs. In 2020, CenterPoint Energy launched a new employment opportunity to provide a more accessible career entry pathway into the skilled trades and utility industry. CenterPoint Energy is recruiting cycles of 10 Appliance Generalist candidates to take part in a six-month paid training course to learn the fundamentals of gas and electricity and how to repair refrigerators, ranges, dishwashers, washers and dryers. Training consists of classroom, lab and field training. At the end of the six-month training, candidates take a hands-on appliance assessment test to become a full-time appliance technician with HSP. The position does not require prior experience or technical school certification/enrollment. CenterPoint Energy intends for this to be an on-going position opportunity. In 2020, CenterPoint Energy participated in the City of Minneapolis's Trans Equity Summit to talk about CenterPoint Energy career opportunities and customer resources. In 2021, CenterPoint worked directly with Minneapolis Employment and Training on outreach and recruitment efforts in Minneapolis. CenterPoint also participated in a May 27 "community-focused curbside career fair" at the North Minneapolis CareerForce location to promote this offering and other open employment opportunities at the Company, including Leak Detectors, Customer Service Representatives, and HVAC Technicians. In January 2022, CenterPoint Energy issued a notification to fund $2.5 million in Workforce Development programs and projects in 2022-2023. The Company received and evaluated project proposals throughout Q1. The Company is in the process of contracting with selected project implementers and will publicly identify the funding recipients and projects in the coming weeks. The projects focus investments on developing an educated workforce of trades

Progress to Date (September 2022)
people, building operators, engineers, and others involved in completing infrastructure and residential projects, with a focus on energy efficiency, diversity, equity, and inclusion. The City's Employment and Training staff are meeting regularly with Health Department staff to coordinate green job exposure opportunities in solar and other green energy job with the CPED Career Pathways program. The City is working to further align efforts between the Health Department's exposure training and the network of workforce development CBOs (community-based organizations) CPED partners with on various jobs programs. The City's ongoing Green Career Exploratory Program was recently highlighted in Midwest Energy News and other media outlets for its successes since inception in 2020. This activity has been closed out.
IF.1 IMPROVE ACCESS TO ENERGY EFFICIENCY BY PROVIDING INCLUSIVE FINANCING IF.1 proposes an Inclusive Financing pilot. On September 1, 2021 CenterPoint Energy and the City of Minneapolis submitted a joint Petition to Introduce a Tariffed On Bill (TOB) Pilot Program to the Minnesota Public Utilities Commission (PUC), Docket No. G-008/M-21-377. Three rounds of comments were received from stakeholders with varying levels of support, generally with modifications recommended. Minneapolis and CenterPoint submitted a modified proposal on May 13, 2022 to address most of the concerns. Modifications included: • Reduced TOB Pilot participant goals with earlier attention to analyzing results from the initial participants; • Definition and identification of potential participants in consultation with community organizations; • Establishment of pathways directing income-qualifying customers to no-cost CIP and Weatherization Assistance Program ("WAP") services; • Removal of mandatory co-pay and program charge from participants; • Exploration of methods to reduce capital costs through leveraging third-party resources; • Reduction of initial startup costs by using existing utility systems; and • Removal of the TOB Pilot feature that would have allowed the utility to disconnect the customer for nonpayment of the TOB charge. Many commenters responded favorably to the changes within the final round of comments filed August 8, 2022. Also in May, EVAC and Board members met to discuss the status of the TOB filing at EVAC's request. A hearing is anticipated in the Fall 2022. Xcel Energy has engaged in City and CenterPoint Energy discussions during this activity's last few years. The utility has performed analyses of measures determined to have some potential from the Cadmus study and found that modeled under the strict PAYS program, these measures do not currently pass the program's qualifying tests. Xcel Energy continues to have

Progress to Date (September 2022)
concerns about the program but remains open to discussions throughout its development. Xcel Energy is engaging with Colorado stakeholders regarding a possible On Bill or TOB program there as well and has stated a willingness to extend any Colorado offering to Minnesota customers. In the meantime, CenterPoint proposes to count electricity side savings from eligible natural gas saving measures in its pilot program in keeping with the PAYS model. This project continues to be pursued and explored by CenterPoint Energy and the City of Minneapolis.

Appendix: Supporting Data

The Partnership originally established metrics based on recommendations of EVAC and the Planning Team in 2015 and first reported on them in the 2015 Annual Report (published in 2016). The intent of this first generation of metrics was to inform the Board of progress in the Partnership, helping the partners understand what activities are happening in the community and determining the level of success. Compiling metrics included significant data collection from all three partners to determine which areas of the community are currently being well-served, less-served, or under-served.

The data collected in the first generation of metrics remains very valuable to the Partnership and other stakeholders, and thus is retained and reorganized under the new seven key metrics. This section contains this data for posterity and to help illuminate the reasons for trends and yearly variation seen in the key metrics in this report.

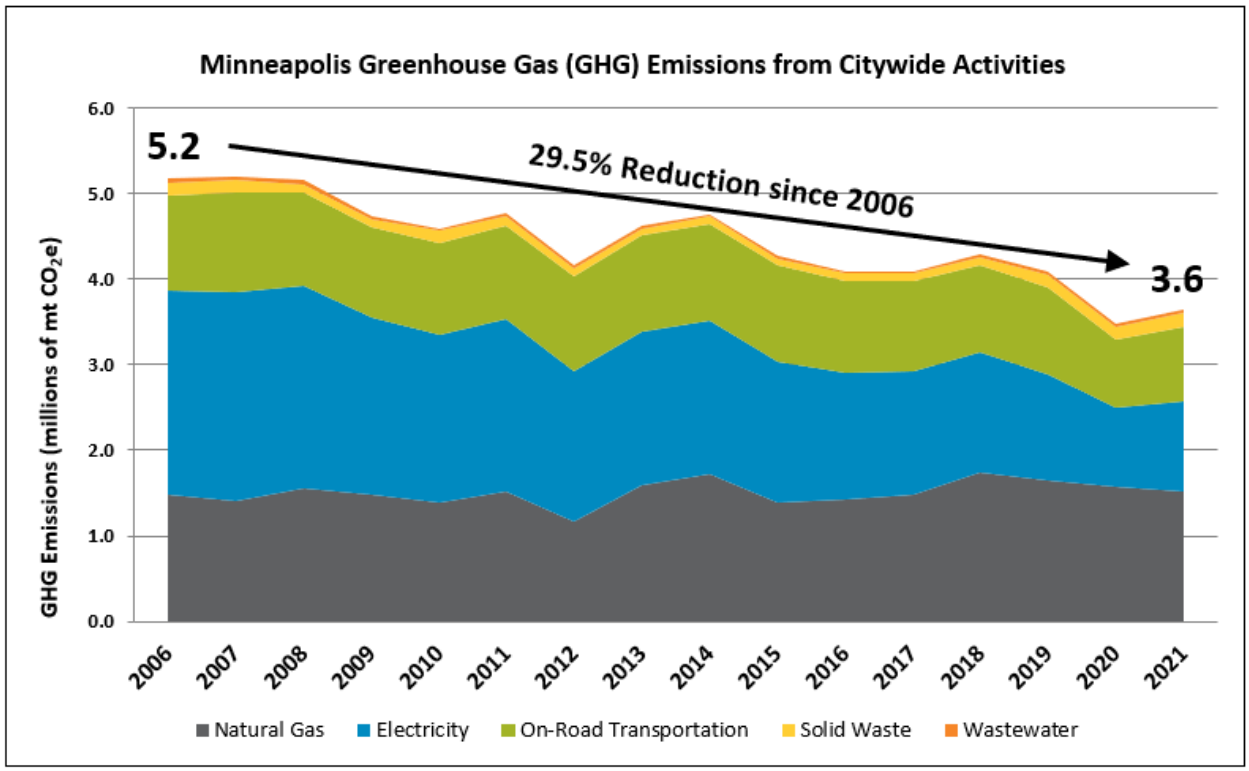
This section also provides trend forecasting (when data is available), which is an area of continued effort by the Partnership.

Metric 1 Supporting Data: Greenhouse Gas Emissions (Community-wide)

Metric		2017	2018	2019	2020	2021
1	GHG emissions - Community-wide (mt CO_2e)	4,094,614	4,280,605	4,082,324	3,473,059	3,641,785
	Change compared to 2006 baseline	-21%	-17%	-21%	-33%	-30%

Supporting Data		2017	2018	2019	2020	2021
1a	Emissions from electricity use (mt CO_2e)	1,429,560	1,403,714	1,233,805	937,136	1,043,027
1b	Electricity emissions factor (mt CO_2e/MWh)	0.372	0.365	0.338	0.274	0.286
1c	Emissions from natural gas use (mt CO_2e)	1,485,074	1,744,181	1,645,787	1,569,921	1,525,648

The figure below represents the citywide greenhouse gas (GHG) emissions inventory, an accounting of Minneapolis emissions from buildings, transportation, wastewater, and solid waste.

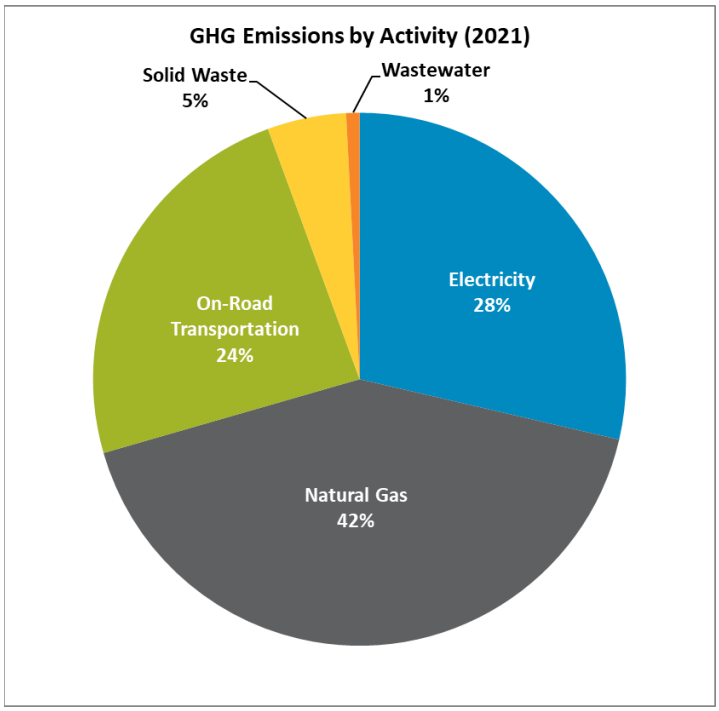


A significant impact on 2020 emissions was the change in our behavior due to the pandemic. Compared to 2019, traffic volume (vehicles miles traveled) was down 20%, resulting in a GHG emissions reduction for the transportation sector of 20%. Traffic volume rebounded 10% in 2021 from its pandemic low, increasing transportation emissions compared to 2020 but remaining less than pre-pandemic levels.

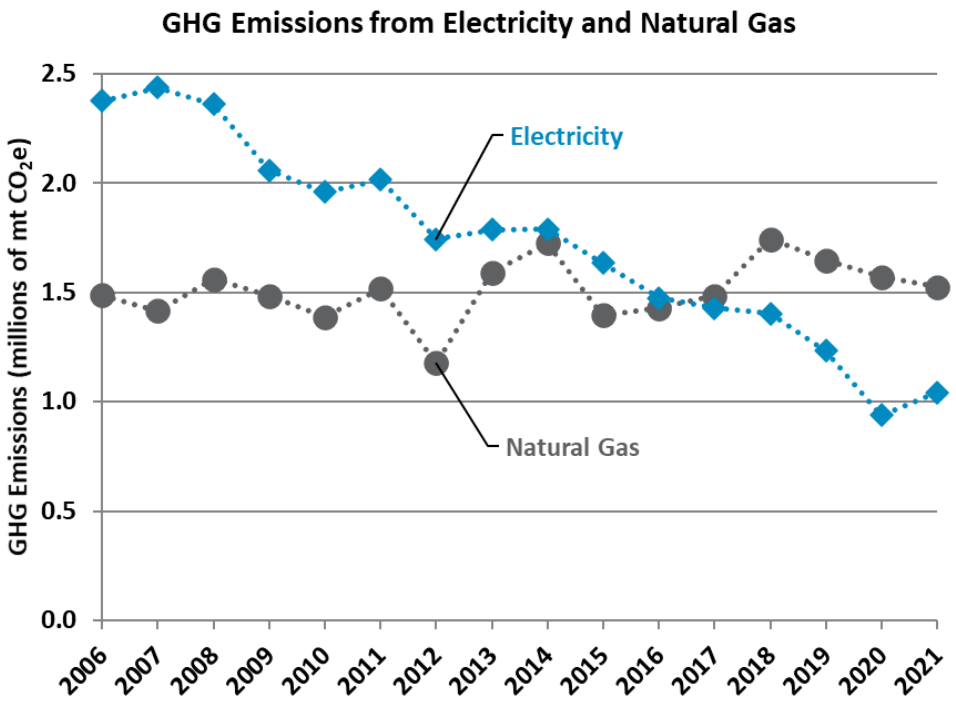
Another significant impact on 2020 emissions was a year-over-year reduction in the electricity sector of 23%. Electricity use was down 5% during this period at least in part due

to building operations changes during the pandemic. Electricity consumption rebounded in 2021, becoming about equivalent to 2019 pre-pandemic levels. Also impacting the increase in electricity emissions in 2021 was a year-over-year increase in the grid electricity emissions factor. Greenhouse gas emissions from a kilowatt of electricity increased over 4% from Xcel Energy's system from 2020 to 2021. A spike in natural gas prices temporarily favored coal-fueled energy across the globe and on the Xcel Energy system. The long term trajectory of greenhouse gas emissions reduction is expected to continue.

Emissions from the two fuels that are the focus of the Clean Energy Partnership – electricity and natural gas – account for 70% of the City's overall greenhouse gas emissions.

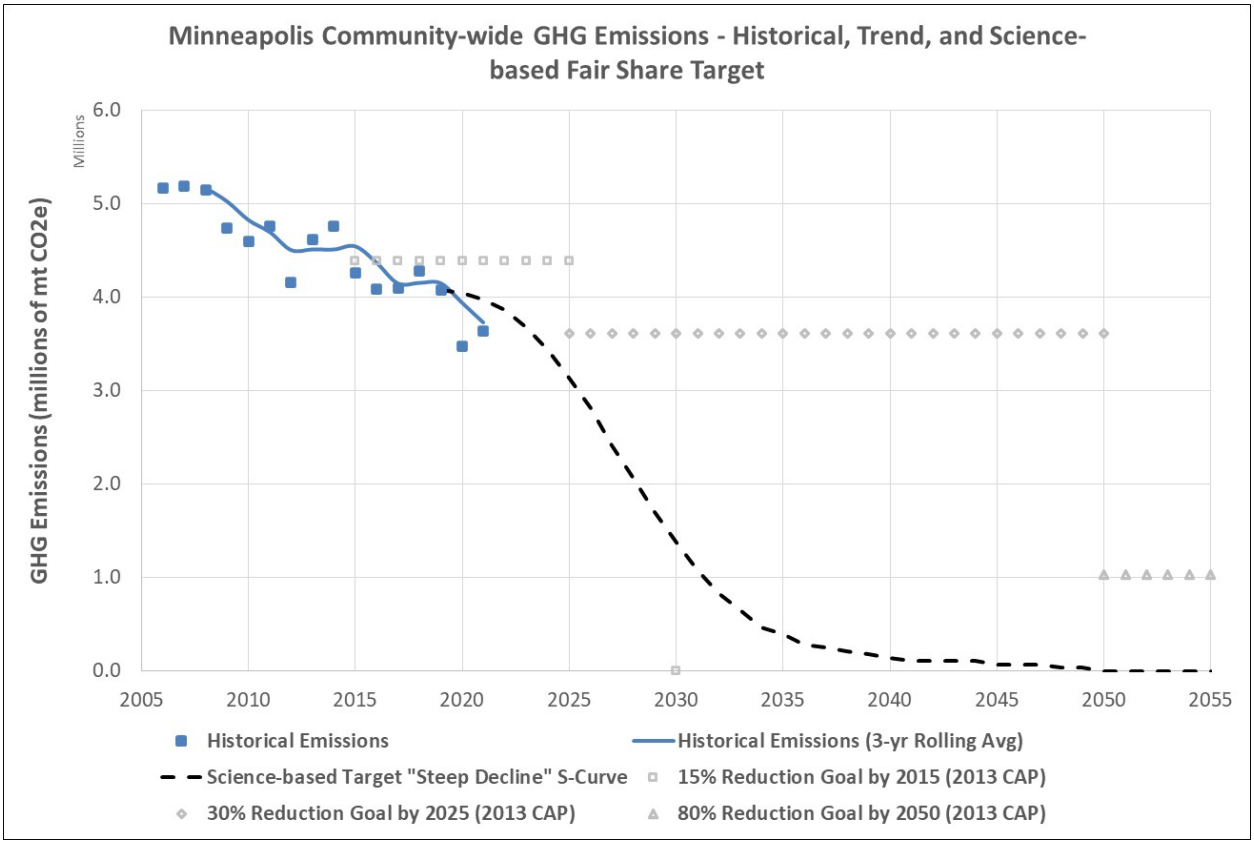


Starting in 2017, the largest source of emissions came from the combustion of natural gas, with emissions from natural gas and electricity further diverging and continuing their respective trends.



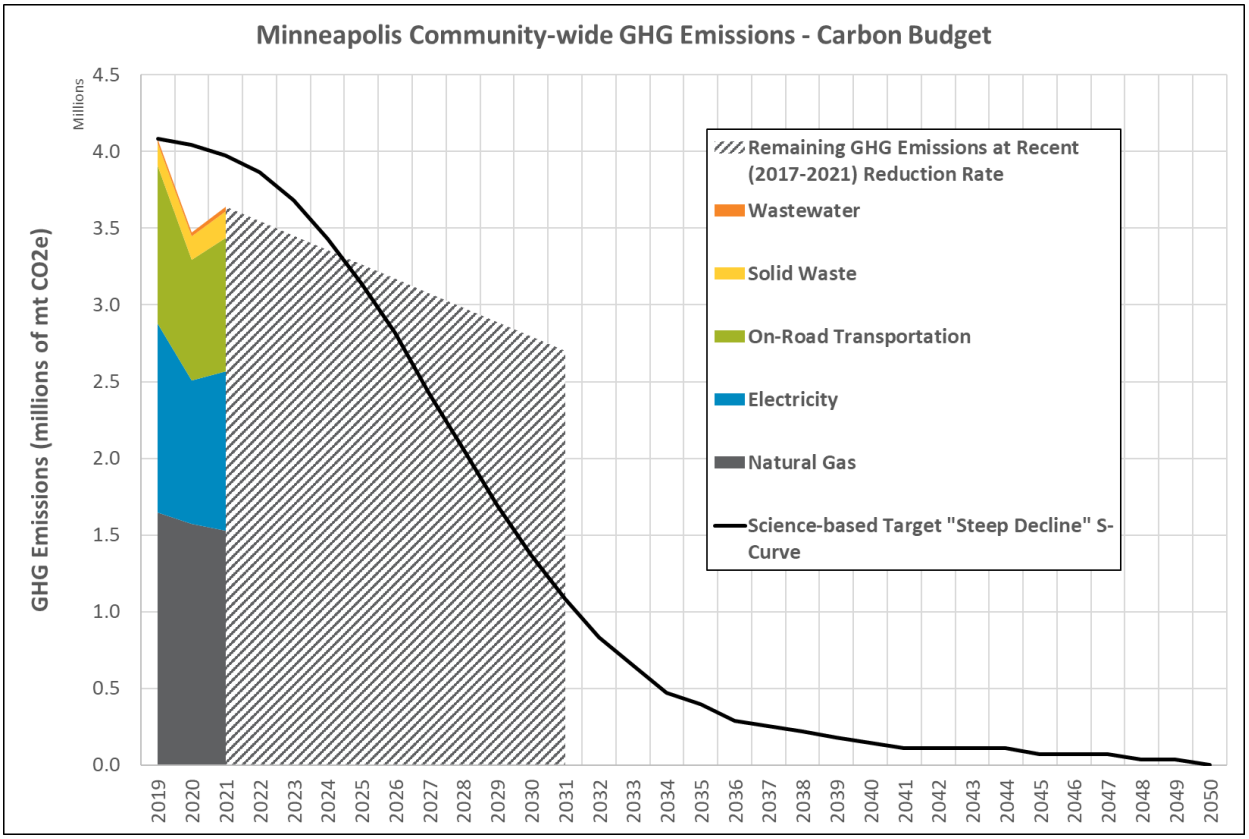
Net Zero by 2050 Goal

On October 8, 2021, Mayor Frey pledged commitment to the *Race to Zero* campaign for the City of Minneapolis to proceed immediately in taking all necessary steps in line with global efforts toward limiting warming to 1.5^0C, including a pledge to reach net-zero GHG emissions by 2050 at the latest. This commitment replaced the previous goals established in the 2013 Minneapolis Climate Action Plan (CAP). These retired goals included greenhouse gas emission reduction targets of 15% by 2015, 30% by 2025, and 80% by 2050 (all from a 2006 baseline). A comparison of the City's new net-zero by 2050 goal with the now-retired 2013 CAP goals is shown below.



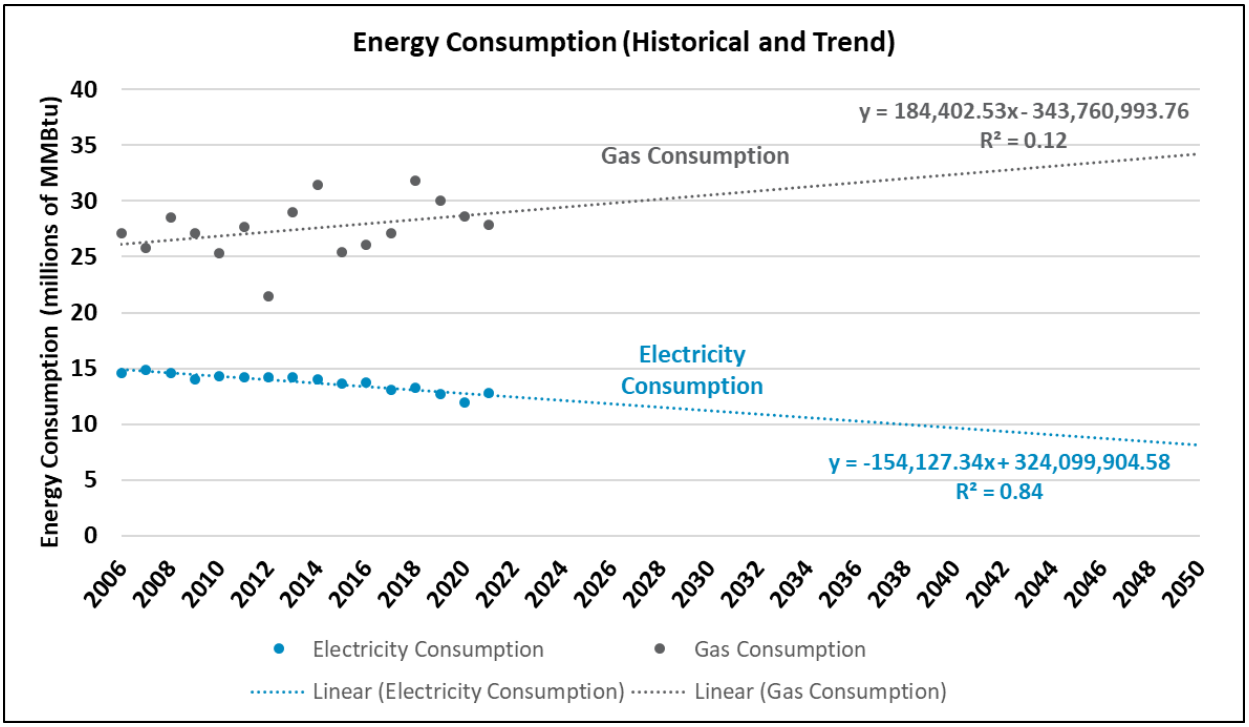
Minneapolis has adopted a "Steep Decline" trajectory to secure our community's contribution to limiting global temperature rises to 1.5^{0}C. This is consistent with C40's *Deadline 2020* methodology which guides cities in defining their specific science-based, fair share GHG emission reduction trajectory. According to *Deadline 2020*, this means that for Minneapolis "emissions need to be immediately and rapidly reduced and the city is sufficiently developed to do so." As seen above, the new trajectory is more aggressive than the City's previous reduction targets. The new pathway equates to net GHG emission reductions of approximately 39% by 2025, 73% by 2030, 92% by 2035, 97% by 2040, 99% by 2045, and 100% by 2050, compared against a 2006 baseline.

The new science-based target illustrates that the next decade is critical toward the city accomplishing this new climate goal, requiring us to greatly accelerate our pace of decarbonization to the point that 2030 emissions are only about 1/3 of 2020 emissions. The science-based target also represents the total GHG emissions that can be emitted by Minneapolis over the next three decades while meeting our City's local obligation to keep global warming to 1.5^{0}C. This "carbon budget" is a simplified measurement of the additional, cumulative emissions that a city can still emit prior to 2050.

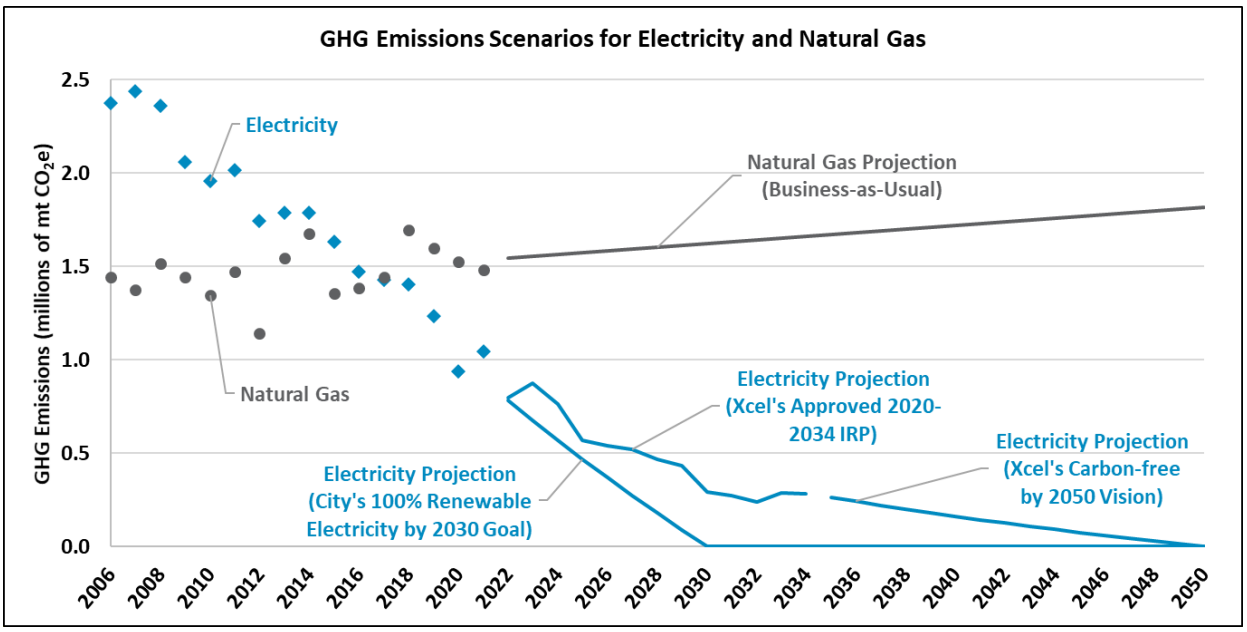


Seen above, projecting the previous five-year rate of decarbonization into the future gives an indication of when (2031) the City's carbon budget may be exhausted. In other words, the cumulative emissions from 2019-2021 plus the likely 2022-2031 emissions under a business-as-usual decarbonization scenario will equal and then exceed all emissions allowed under the net-zero pathway through 2050.

To gauge the impact of the future emissions covered by the Clean Energy Partnership, a trend line can be created by looking at the underlying historical energy consumption data and applying a linear regression. The resulting trend prediction is shown in the following graph.



To predict future emissions, the consumption forecasts above are coupled with emission factors for fuels, while keeping everything else constant. The emission factor for natural gas is assumed to remain constant. CenterPoint Energy has begun the process of creating an Innovation Plan that may include natural gas decarbonization strategies to modestly decrease the gas emissions factor in the coming years. The emission factor for electricity falls over time in three scenarios: 1) Xcel Energy's current, approved 2020-2034 Integrated Resource Plan (IRP), 2) Xcel Energy's carbon-free by 2050 vision, and 3) The City of Minneapolis' 100% renewable electricity by 2030 goal. The results show the emissions trajectory for each fuel.

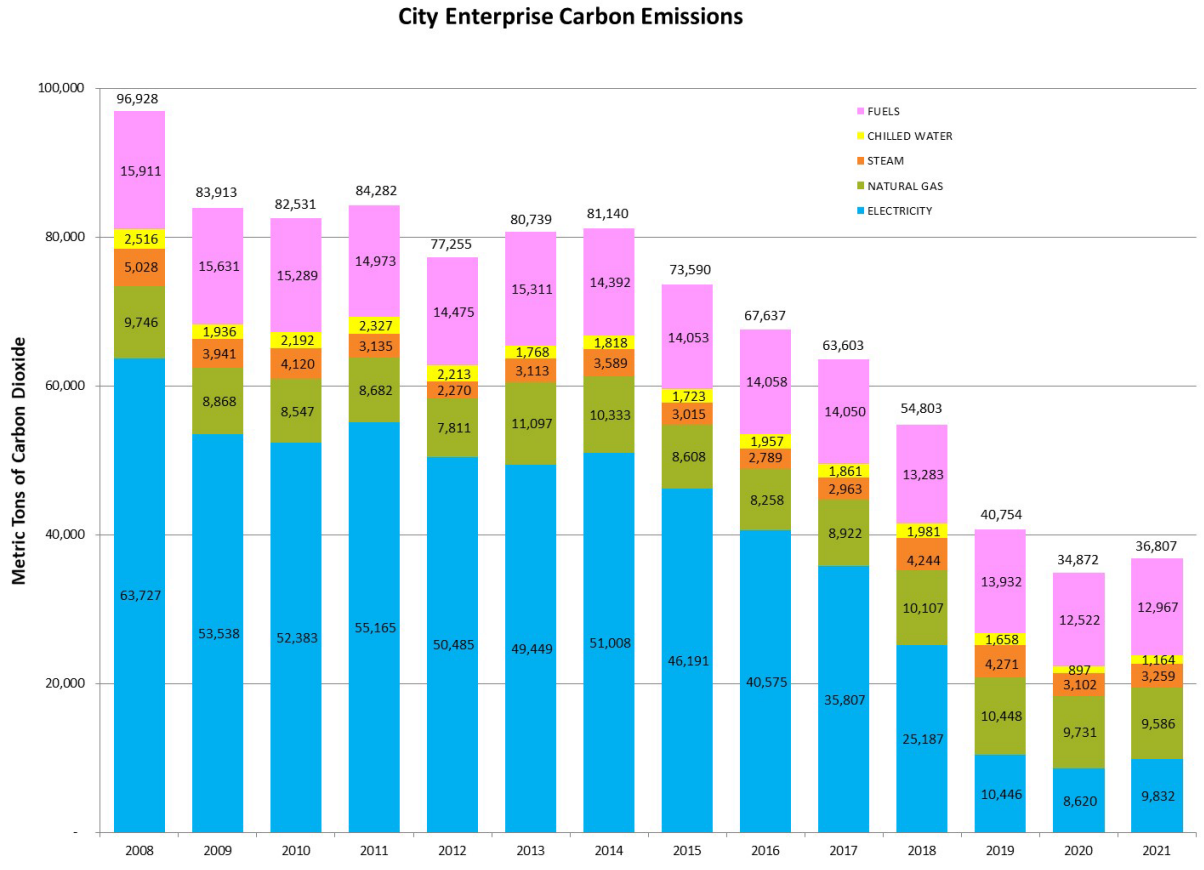


Metric 2 Supporting Data: Greenhouse Gas Emissions (Municipal Operations)

Metric		2017	2018	2019	2020	2021
2	GHG emissions - Municipal operations (mt CO_2)	63,603	54,803	40,754	34,872	36,807
	Change compared to 2008 baseline	-34%	-43%	-58%	-64%	-62%

Supporting Data		2017	2018	2019	2020	2021
2a	Emissions from electricity use (mt CO_2)	35,807	25,187	10,446	8,620	9,832
2b	Emissions from natural gas use (mt CO_2)	8,922	10,107	10,448	9,731	9,586

Greenhouse gas emissions from City facilities and operations have decreased dramatically (62%) since the 2008 baseline. This drop has been largely due to substantial decreases in electricity emissions, due to reductions in Xcel Energy's grid mix emissions and City renewable energy projects and subscriptions. Starting in 2019, electricity was no longer the largest single source of emissions in the inventory, in 2021 representing 27% compared to 35% for vehicle fuels. Electricity has accounted for 56 percentage points of the 62% decrease seen below.



Emissions from natural gas have remained relatively constant and are the third largest source of emissions after vehicle fuels and electricity. Likely within the next few years, emissions from natural gas will eclipse those from electricity as renewable electricity for municipal operations increases due to the City's 100% renewable electricity goal. New

solutions, including energy efficiency and beneficial electrification, will be needed to reduce reliance on fossil fuels for heating in the future. Additional options to consider may be carbon capture technology and renewable natural gas.

The increase in emissions in 2021 compared to 2020 is the result of several factors:

1. The electricity grid emissions factor was higher in 2021 versus 2020 because more coal was burned than natural gas due to the market price of natural gas increasing.
2. Municipal buildings had more workers returning to work starting in 2021 - resulting in building occupancy that was slightly up and electrical plug loads also increasing accordingly.
3. The City added the new Public Service Building in 2021. However, other buildings (City of Lakes and Public Service Center) remained in service, though they were once under consideration for sale as the staff were consolidated into the new Public Service Building.
4. The City's Renewable*Connect subscription was slightly down from the previous year due to Convention Center using less in 2021 than 2020 (2020 still had some large events for Convention Center before the pandemic occurred, whereas 2021 had none).

Metric 3 Supporting Data: Energy Use (Residential)

Metric		2017	2018	2019	2020	2021
3	Energy use - Residential (MMBtu)	13,520,158	15,617,627	15,229,655	14,270,066	13,803,710
	Growth baseline energy use - Residential (MMBtu)	14,759,991	14,776,811	14,793,631	14,810,451	14,827,270
	Change compared to growth baseline	-8%	6%	3%	-4%	-7%

Residential Energy Use		2017	2018	2019	2020	2021
3a	Residential building electricity use (MWh)	950,159	1,029,006	970,477	1,044,234	1,128,700
3b	Residential building gas use (therms)	102,712,038	120,984,119	119,102,768	106,998,274	99,457,659

Residential Energy Use

Residential energy use decreased in 2021 compared to 2020 and year-to-year energy use continues to fluctuate greatly due to changes in yearly temperatures. The National Oceanic and Atmospheric Administration (NOAA) recorded a 2% decrease in heating degree days, a measurement of heating demand, compared to 2020.

In 2021, Minneapolis had approximately 125,700 residential natural gas customers, an increase of 9.3% over ten years. While overall residential natural gas consumption decreased over that same ten-year period by 12%, the weather-normalized gas use per customer decreased by about 7.3%. In 2021, Minneapolis residential gas customers used approximately 791 therms of natural gas or the equivalent of 4.2 metric tons of carbon dioxide equivalent (CO_2e).

Electricity use varies with weather and the meteorological summer of 2021 was the hottest on record for Minneapolis. Minneapolis customers used an average annual electric consumption of 6,045 kWh in 2021, equating to approximately 1.72 metric tons of CO_2e per household (after accounting for carbon-free Windsource and Renewable*Connect commitments by Minneapolis residents). This level of household emissions (slightly more than one-third of the annual emissions of a typical gasoline-powered vehicle) is a small increase from 2020 (due to weather and other factors discussed under Metric 1) but still part of the ongoing decline in CO_2e per kWh on Xcel Energy's Upper Midwest system.

Utility Residential Conservation Improvement Programs

CenterPoint Energy and Xcel Energy's portfolio of Conservation Improvement Programs continued to help Minneapolis residents conserve energy, save on their utility bills, and improve the comfort and safety of their homes. On the gas side, CenterPoint Energy's Efficiency Programs & Rebates spending amounted to $2.5 million, including $1.25 million in customer rebates, to assist more than 32,000 Minneapolis residents save over 1 million therms of natural gas and $673,000 on their annual gas utility bills in 2021 (calculation does not include income-qualifying or multi-family program participants). The decrease in participation from 2020 to 2021 is attributable to the absence of market rate furnace tune ups which were not included in the new triennial plan. Xcel Energy's Residential Energy Efficiency Programs & Rebates provided over 4,900 residential customer rebates, over 2.7 million kWh in energy savings, $1.3 million in rebates, and an estimated $1.4 million saved on customer bills over the life of the measures.

Home Energy Squad

Home Energy Squad (HES) is a joint program offered by Xcel Energy and CenterPoint Energy to help residential customers identify energy efficiency opportunities via a home energy assessment.

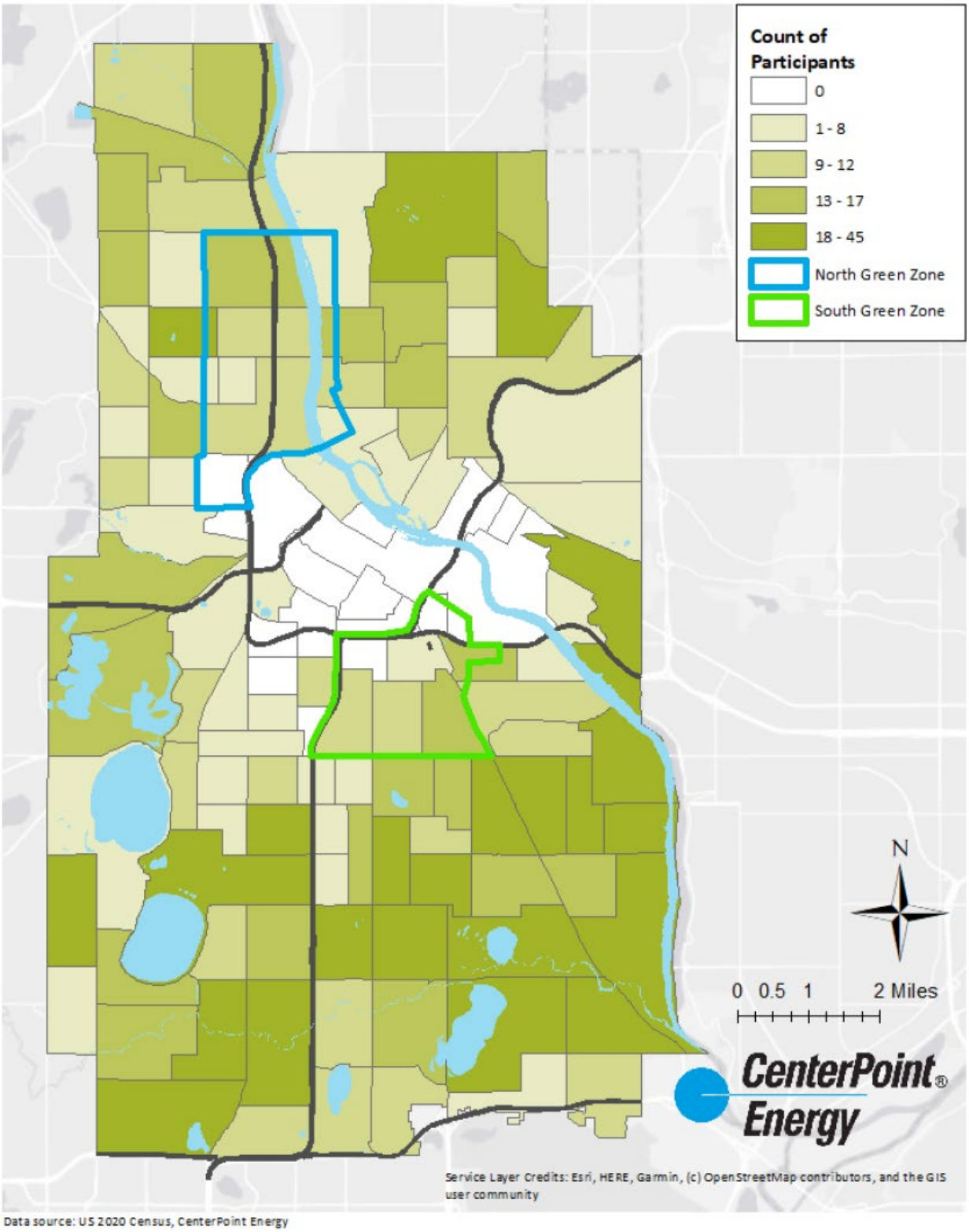
	Home Energy Squad Program	2017	2018	2019	2020	2021
3c	*Home Energy Squad* participation	620	869	1,786	1,068	1,716
3d	*Home Energy Squad* annual energy savings (kBtu)	3,599,205	5,115,628	10,538,705	4,740,255	9,142,821
3e	*Home Energy Squad* estimated annual cost savings	$ 46,156	$ 57,070	$ 112,911	$ 69,544	$ 111,712
3f	Residences (1-4 unit) annually served by HES	0.7%	1.0%	2.0%	1.2%	1.9%

In spite of the ongoing Covid-19 pandemic, 1,716 HES visits were completed. The option of virtual visits, created in 2020, continued to be utilized by customers. The following table describes Home Energy Squad participant characteristics in 2021.

2021 Minneapolis Home Energy Squad Visits	Number	Percent of Total
Total HES Visits	1,716	100%
Visits at Owner-occupied homes	1550	90%
Visits at renter-occupied homes	166	10%
Visits at single family residences	1402	82%
No-cost visits for low-income customers	132	8%
Received wall insulation recommendation	714	42%
Received attic insulation recommendation	1109	65%
Received air sealing recommendation	789	46%

The following map shows the distribution of Home Energy Squad visits across Minneapolis in 2021. In 2021, the neighborhoods that saw the most visits were: 1.) Longfellow, 2.) Standish-Ericsson, 3.) Prospect Park, 4.) Nokomis East, and 5.) Tangletown.

Home Energy Squad Participation, 2021



Data source: US 2020 Census, CenterPoint Energy

Home Energy Squad-driven loans

The Center for Energy and Environment's Home Loans Programs offers low-interest loans for home energy efficiency improvements. In 2021, Minneapolis residents financed 6 high-efficiency air conditioners, 10 high-efficiency heating systems, 56 home insulation projects, 8 Solar projects, and 2 high-efficiency water heaters. The City of Minneapolis offered 0% interest loans to 73 of the projects.

	Energy Efficiency Loans	2017	2018	2019	2020	2021
3g	HES-driven energy efficiency loan count	37	73	153	103	82
3h	HES-driven value of loans	$ 346,772	$ 628,422	$ 1,216,944	$ 845,660	$ 807,610

Air Sealing & Insulation Rebates

CenterPoint Energy offers a rebate for residential air sealing and insulation upgrades. Insulation and air sealing improvements are among the greatest opportunities for energy savings in homes, with most of the energy savings coming from reduced heating loads in the winter. The energy savings potential is particularly high for older homes that may have little, or even no, insulation in the walls and attic.

Home insulation rebated projects in Minneapolis averaged approximately 318 therms of estimated annual energy savings per project, or approximately 30% of weather-normalized natural gas use per Minneapolis residential customer.

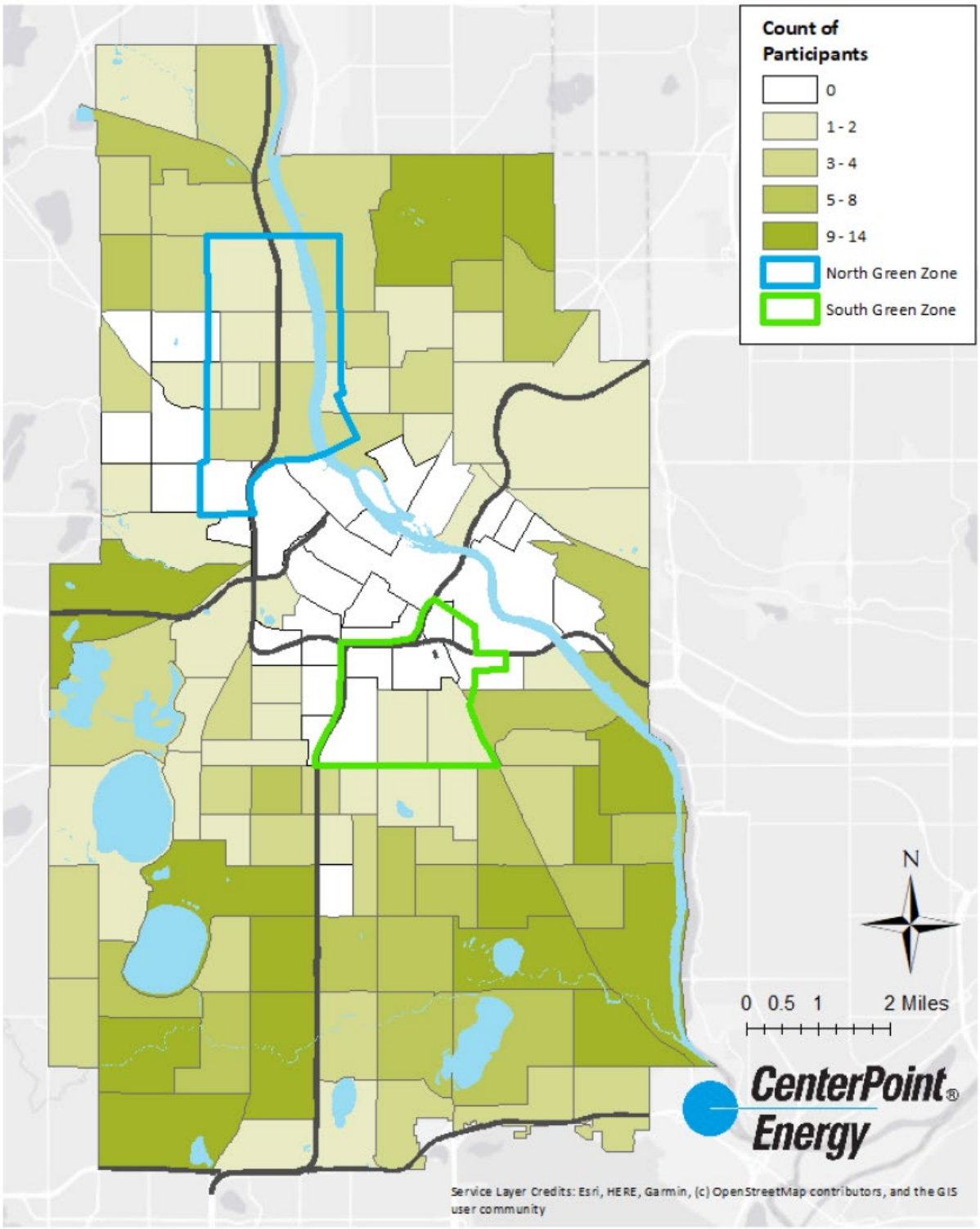
	Air Sealing & Insulation (ASI) Rebates	2017	2018	2019	2020	2021
3i	ASI participating customers	242	258	569	470	400
3j	ASI estimated annual energy savings (therms)	67,390	71,670	136,330	108,900	127,160
3k	ASI estimated annual cost savings	$ 43,938	$ 46,729	95,158	70,785	111,897
3l	ASI rebate dollars spent	$ 136,060	$ 138,469	$ 300,573	$ 253,513	$231,400

In 2021, the number of Minneapolis residences to receive an air sealing and insulation rebate was 400.

Of the 400 rebated insulation projects, 14% (56) also received 0% interest loans provided by the City of Minneapolis in collaboration with the Center for Energy and Environment.

The following map shows the distribution of CenterPoint Energy's home insulation rebates across Minneapolis in 2021.

CenterPoint Energy Home Insulation Rebate Program Participation, 2021



Data source: US 2020 Census, CenterPoint Energy

Income-Qualifying Conservation Improvement Programs

CenterPoint Energy and Xcel Energy offer energy conservation services for low-income customers, including specifically designed opportunities for homeowners, renters, multi-family building owners, and affordable housing organizations.

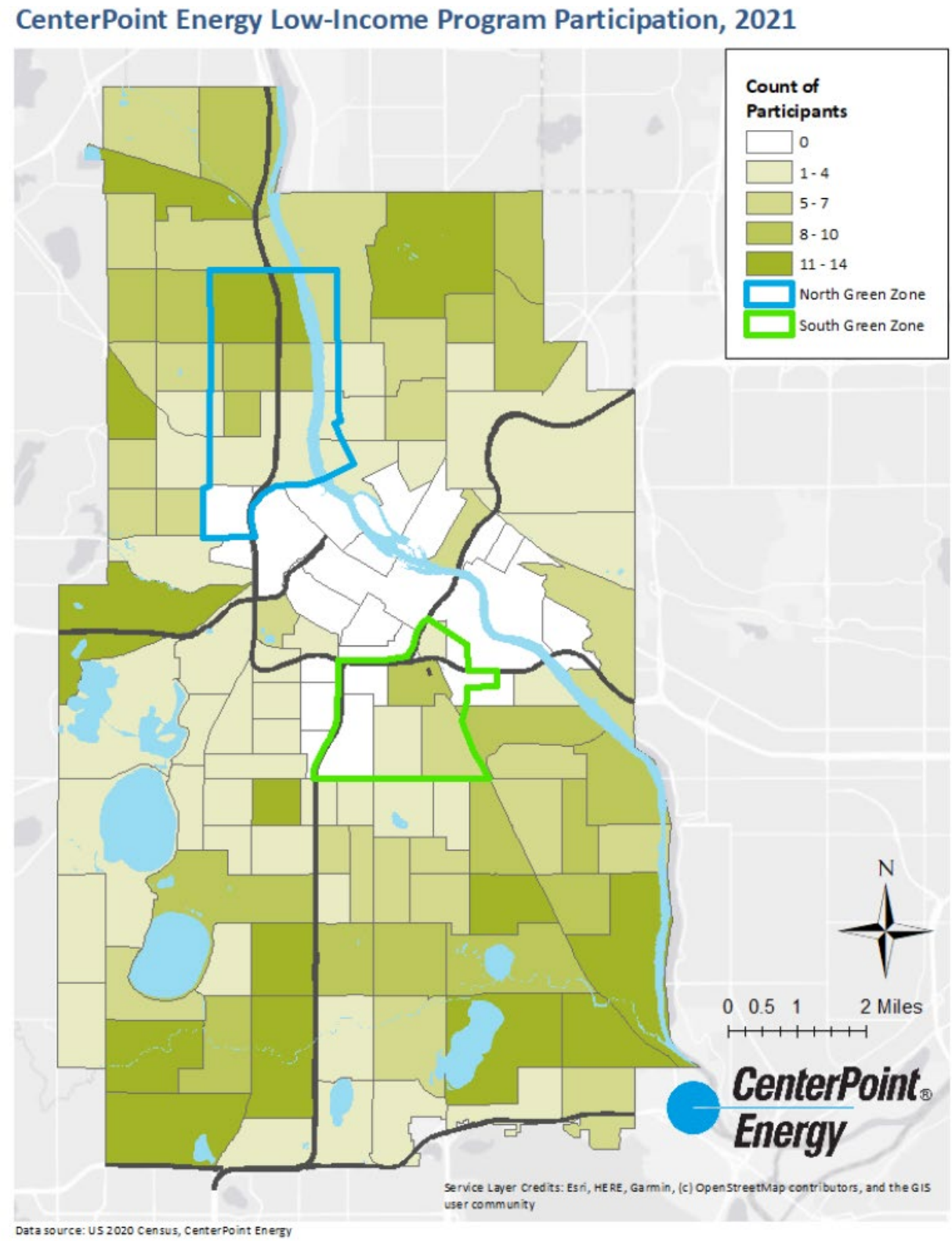
	Income-Qualifying Energy Efficiency Programs	Source	2018	2019	2020	2021
3m	Low-income CIP program participants	CNP	690	556	437	469
3n	Low-income CIP dollars spent	CNP	$ 2,036,310	$ 1,827,837	$ 1,055,068	$ 1,329,301
3o	Low-income CIP est. energy savings (therms/yr)	CNP	151,380	65,590	61,420	130,000
3p	Low-income CIP est. annual cost savings	CNP	$ 98,711	$ 45,782	$ 39,923	$ 98,615
3q	Low-income CIP program participants	Xcel	831	730	496	527
3r	Low-income CIP dollars spent	Xcel	$ 753,378	$ 638,193	$ 363,833	$ 432,343
3s	Low-income CIP est. energy savings (kWh/yr)	Xcel	451,639	438,243	348,402	363,104
3t	Low-income CIP est. annual cost savings	Xcel	$ 43,524	$ 48,478	$ 45,794	$ 53,141
3u	Weatherization Assistance Program (WAP) visits	DOE	238	237	76	219
3v	WAP dollars spent	DOE	$ 1,188,524	1,091,426	302,702	1,042,324

	Energy Cost Assistance Programs	Source	2018	2019	2020	2021
3w	Gas Affordability bill pay assistance Participants	CNP	3,228	3,451	2,705	2,811
3x	Gas Affordability bill pay assistance total spent	CNP	$ 1,396,992	$1,519,908	$948,156	$711,091
3y	Power-On participants	Xcel	1,550	2,515	2,683	2,792
3z	Power-On total spent	Xcel	$ 754,558	$ 1,171,688	$ 1,329,997	$ 1,533,997
3aa	Senior Discount participants	Xcel	5,817	5,864	5,370	5,182
3bb	Senior Discount total spent	Xcel	$ 969,362	$ 962,811	$ 973,938	$ 967,321
3cc	Medical Affordability Program participants	Xcel	344	397	235	156
3dd	Medical Affordability Program total spent	Xcel	$ 268,275	$ 312,415	$ 168,903	$ 121,418

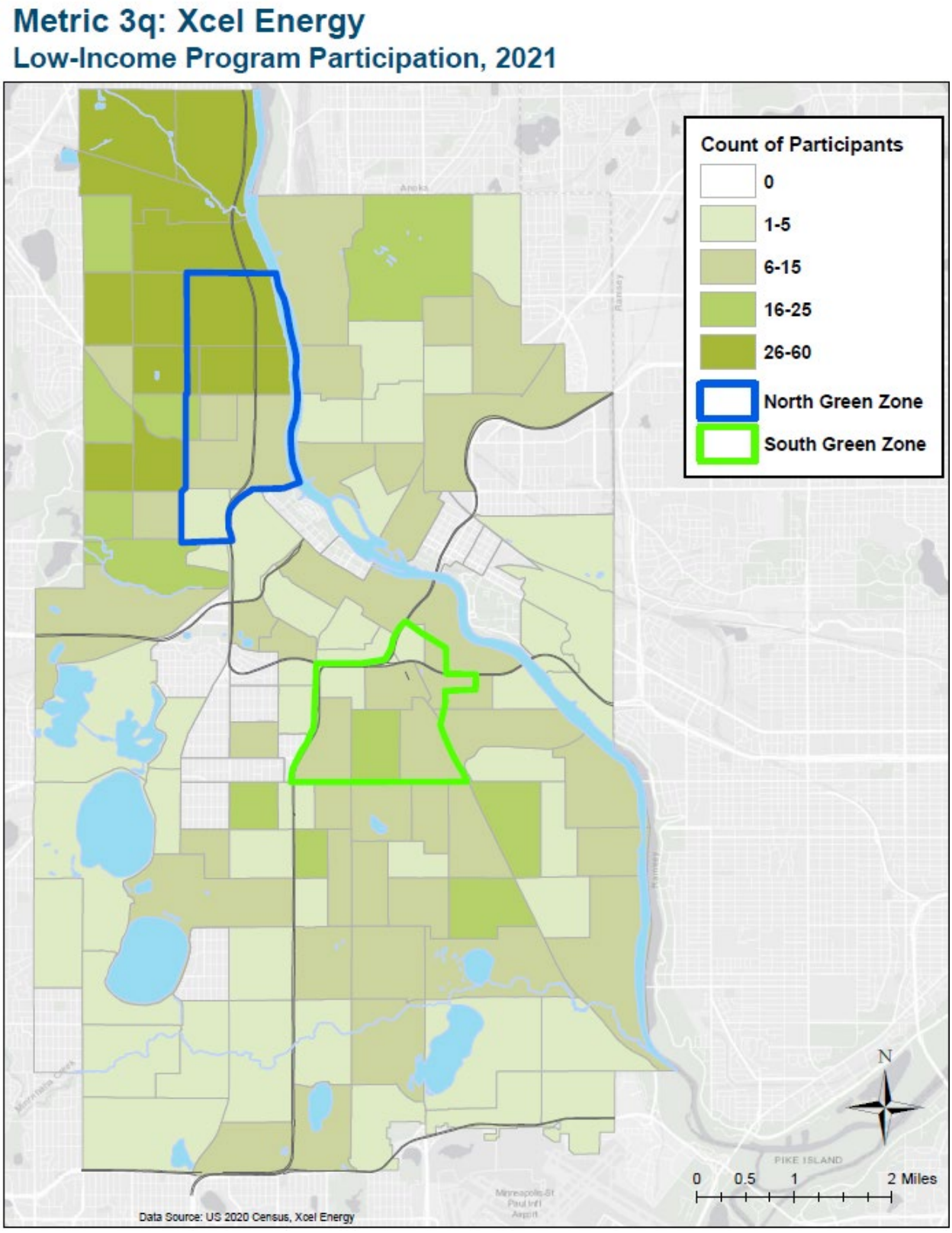
In 2021, CenterPoint Energy's Income-Qualified Programs and Gas Affordability Program directed more than $2.3 million to help qualifying customers in Minneapolis reduce their energy costs and improve the efficiency, comfort and safety of their homes. While participation increased over the previous year, the programs continued to be impacted by the ongoing pandemic.

Xcel Energy's Energy Assistance Options include access to the Power-On Program, Senior Discount, and Medical Affordability Program as well as Income Qualified Energy Efficiency programs such as Home Energy Savings, Low Income Home Energy Squad, and Multi-Family Energy Services Program. In total, these programs reached over 8,100 Minneapolis customers providing over $2.6 million in assistance and energy efficiency options in 2021.

The following map shows the participation distribution of CenterPoint Energy income-qualified energy efficiency services, including Low Income Weatherization, Low Income Rental Efficiency, Stay Safe Stay Warm, Non-Profit Affordable Housing Rebates, and Low Income Multi Family Building Efficiency received across Minneapolis in 2021.



The following map shows the distribution of Xcel Energy's income-qualified energy efficiency services received across Minneapolis in 2021 including the Home Energy Savings and Low Income Multi-Family programs.



Metric 4 Supporting Data: Energy Use (Commercial and Industrial)

Metric		2017	2018	2019	2020	2021
4	Energy use - Commercial and Industrial (MMBtu)	29,942,608	33,015,226	30,791,985	29,928,271	30,652,620
	Growth baseline energy use - Commercial and Industrial (MMBtu)	30,963,136	31,017,477	31,071,818	31,126,159	31,180,500
	Change compared to growth baseline	-3%	6%	-1%	-4%	-2%

Commercial/Industrial Energy Use		2017	2018	2019	2020	2021
4a	Commercial building electricity use (MWh)	2,892,605	2,863,923	2,742,094	2,466,135	2,609,754
4b	Industrial building electricity use (MWh)					
4c	Commercial building gas use (therms)	141,309,553	163,935,711	160,205,374	147,552,217	142,385,636
4d	Industrial building gas use (therms)	27,001,432	33,389,796	21,044,749	31,957,081	36,584,522

Commercial and Industrial Energy Use

Electric consumption increased 6% from 2020 to 2021 for commercial and industrial customers within the city. Natural gas consumption for commercial and industrial customers was about flat from 2020 to 2021.

Progress toward the City's goal is measured against a growth baseline established in the Climate Action Plan. The growth baseline established a post-2011 business-as-usual forecast with a 0.5% annual increase in electricity consumption and no annual increase in natural gas consumption.

Separate electricity use data for commercial and industrial customers is currently not available for all years except 2015. Xcel Energy's data privacy policy allows disclosure of aggregated data of more than 15 customers where no one customer comprises more than 15 percent of the total usage. The industrial sector in Minneapolis does not meet this threshold.

Utility Commercial/Industrial Conservation Improvement Programs

CenterPoint Energy and Xcel Energy offer a variety of energy efficiency programs to their commercial and industrial customers throughout Minneapolis. These programs offer rebates, consultive services and other funding support to engage customers in energy efficiency opportunities that range from full process and systematic improvements to specific end use measure installations such as heating, cooling, lighting, food service equipment, and motors.

In 2021, CenterPoint Energy's Efficiency Programs & Rebates spending amounted to more than $2 million, including $1.1 million in rebates, to help 550 business customers reduce natural gas use by approximately 3.5 million therms and save businesses over $2.2 million in annual energy costs.

REBUILD Bonus Rebates

To help Minneapolis-area businesses and property owners recover from property damage that occurred during the year's civil unrest, CenterPoint Energy launched REBUILD in August of 2020. Customers affected by property damage during the civil unrest that enrolled in REBUILD by December 31, 2021 could apply for triple the standard rebate amount for high-efficiency natural gas equipment and no-cost energy advisory services. The deadline to purchase and install qualifying equipment and apply for a triple rebate through REBUILD was extended from December 31, 2021 to July 1, 2022. For new construction or major renovations, CenterPoint will work with customers to maximize rebates within the existing

structure of current programs. By the end of 2021, 60 customers enrolled with sixteen triple rebates valued at $140,000 and 9,229 Dth saving having been paid to twelve customers.

Xcel Energy's Business Programs & Rebates provided over 1,400 rebates to Minneapolis businesses in 2021 totaling over $7.9 million that reduced energy consumption 74,851 MWh, saving businesses nearly $4.5 million in energy costs.

	Commercial/Industrial Conservation Improvement Programs	Source	2018	2019	2020	2021
4e	Energy efficiency program participation (customers)	CNP	480	569	509	559
4f	Energy efficiency program participation (rebates)	CNP	1,062	1,405	4,124	5,517
4g	Rebate dollars spent	CNP	$ 1,275,517	$ 914,578	$ 1,002,066	$ 1,149,521
4h	Estimated annual energy savings (therms)	CNP	4,945,230	3,730,500	4,723,570	3,492,350
4i	Estimated annual cost savings	CNP	$ 2,210,343	$ 2,286,713	2,921,399	2,150,642
4j	Energy efficiency program participation (customers)	Xcel	1,008	898	1087	1168
4k	Energy efficiency program participation (rebates)	Xcel	2,113	1758	1432	1478
4l	Rebate dollars spent	Xcel	$ 7,686,747	$ 5,311,750	$ 7,144,317	$ 7,975,714
4m	Estimated annual energy savings (kWh)	Xcel	84,863,345	55,934,867	63,687,110	74,851,048
4n	Estimated annual cost savings	Xcel	$ 4,777,461	$ 3,306,631	$ 4,028,305	$ 4,491,063

Multi-Family Building Conservation Improvement Programs

Multi-Family energy efficiency programs are offered by both CenterPoint Energy and Xcel Energy, including the jointly offered Multi-Family Building Efficiency program and Energy Design Assistance program.

	Multi-Family Building Conservation Improvement Programs	2017	2018	2019	2020	2021
4o	Multi-family programs participants	191	133	328	264	242
4p	Multi-family programs estimated annual energy savings (Therms)	552,270	891,040	887,170	959,170	966,254
4q	Multi-family programs estimated annual cost savings	$ 318,251	$ 609,550	$ 575,311	$ 619,190	$ 622,663
4r	Multi-family programs rebate dollars spent	$ 286,612	$ 323,003	$ 393,171	$ 585,855	$ 461,448
4s	Multi-family programs participants	943	1,056	146	165	100
4t	Multi-family programs estimated annual energy savings (kWh)	5,674,561	19,446,382	2,582,954	2,981,937	2,346,532
4u	Multi-family programs estimated annual cost savings	$ 603,490	$ 1,094,752	$ 152,693	$ 188,612	$ 146,769
4v	Multi-family programs rebate dollars spent	$ 828,862	$ 1,719,537	$ 621,583	$ 432,691	$ 385,467

In 2021, multifamily buildings received $461,000 in CenterPoint Energy rebates for natural gas efficiency measures that will save customers over $622,000 in gas costs a year.

In 2021, the multi-family buildings Xcel Energy serves received over $380,000 in rebates for installed electric measures, saving an estimated $147,000 per year.

Energy Design Assistance

The Energy Design Assistance (EDA) program partners Xcel Energy and CenterPoint Energy in offering design consultation, energy modeling services, and financial incentives to building owners, architects, and engineers to incorporate energy-efficient systems and equipment in the design of new construction and/or renovations. In 2021, incentives from this joint utility offering totaled over $3.8 million dollars.

EDA projects within the city in 2021 included new construction buildings (such as a new City building), major renovation at multiple schools, and multi-family buildings.

	Energy Design Assistance Program	Source	2018	2019	2020	2021
4w	*Energy Design Assistance* program participation	CNP	35	29	38	34
4x	*Energy Design Assistance* estimated annual energy savings (therms)	CNP	1,788,769	543,430	844,130	746,110
4y	*Energy Design Assistance* rebate dollars spent	CNP	664,909	$ 217,639	$ 313,227	$ 411,836
4z	*Energy Design Assistance* program participation (projects)	Xcel	55	33	55	78
4aa	*Energy Design Assistance* estimated annual energy savings (kWh)	Xcel	14,553,981	5,838,130	17,396,292	22,735,650
4bb	*Energy Design Assistance* rebate dollars spent	Xcel	$ 1,816,269	$ 1,019,560	$ 2,487,434	$ 3,392,438

Metric 5 Supporting Data: Renewable Electricity (Community-wide)

Metric		2017	2018	2019	2020	2021
5	Renewable Electricity (Community-wide)	28.7%	26.3%	23.3%	33.6%	34.5%

Supporting Data		2017	2018	2019	2020	2021
5a	Grid Mix Renewable Percentage	28.0%	26.2%	26.0%	31.8%	33.1%
5b	Adjusted Grid Mix Renewable Percentage	27.0%	22.3%	17.9%	25.3%	26.4%
5c	Community-wide Electricity Consumption (MWh)	3,842,763	3,892,929	3,712,477	3,510,358	3,738,454
5d	Local Actions (MWh)	65,303	152,075	198,248	290,884	303,048
5e	Grid Mix Carbon-Free Percentage	57.0%	55.7%	54.0%	61.6%	60.3%

The City of Minneapolis adopted its 100% Renewable Electricity Resolution in 2018. The elements of this resolution align with the Sierra Club's Ready for 100 commitment guidelines with strong emphasis on equity and environmental justice as well as its consumption based definition, including:

> *"the City of Minneapolis is committed to meeting its renewable electricity goals with as little reliance on purchasing Renewable Energy Credits (RECs) on the open market as possible, and will give goal preference and credit for resources exhibiting additionality regardless of REC ownership, such as community solar gardens and local solar installations"*
>
> *"Xcel Energy's current and future renewable electricity generation mix will be counted toward municipal and community-wide goals with support from the City in its efforts to transition to renewable energy throughout its service territory"*

Aligned with the Sierra Club guidance and the City's resolution, the calculation methodology adopted by the City is action-based, meaning based on the decisions by parties within the City. These parties include Xcel Energy (acting on behalf of their customers), the City's municipal operations, and the residential, commercial, and industrial electric account holders within the City. As the adopted resolution states, this methodology does not completely align with REC ownership.

Local actions by the City enterprise, residents, and businesses consist of the four programs in Metric 7 (Windsource®, Solar*Rewards (Rooftop) and Solar*Rewards Community® (community solar gardens), and Renewable*Connect) that account for local and directly purchased renewable electricity. The grid mix renewable percentage reported by Xcel Energy in their Community Energy Reports is adjusted to remove the impact of all local actions across their entire Minnesota service territory. The effect of this is that local actions are not double-counted (i.e. actions by a Minneapolis resident are only counted once and the actions of any non-Minneapolis resident in Xcel Energy territory are not counted).

The Xcel Energy renewable electricity grid mix decreased slightly in 2018 and 2019 due fluctuations in the portion of Xcel Energy's renewable generation source that is available during the year, but 2020 saw a noticeable increase, as reported both in Xcel Energy's resource mix and Certified Renewable Percentage. Subscription consumption amounts in Xcel Energy's Renewable*Connect, Windsource, and community solar garden programs

have risen in recent years. Generation may fluctuate annually because of Xcel Energy's requirement to comply with the Midcontinent Independent System Operator's (MISO) to produce energy from certain plants due to pricing and availability. Renewable Energy is always dispatched first. Xcel Energy's approved Integrated Resource Plan projects that by 2030 about 55% of its generated electricity will come from renewable energy.

Metric 6 Supporting Data: Renewable Electricity (Municipal Operations)

Metric		2017	2018	2019	2020	2021
6	Renewable Electricity (Municipal Operations)	33%	53%	85%	89%	89%

Supporting Data		2017	2018	2019	2020	2021
6a	Electricity consumption (kWh)	102,100,989	101,084,369	88,812,578	86,229,499	86,780,093
6b	Windsource subscription (kWh)	300,000	225,000	-	-	-
6c	Renewable*Connect subscription (kWh)	6,067,895	35,440,161	59,476,369	54,765,280	52,374,250
6d	Community Solar Garden subscriptions (kWh)	23,857	844,831	11,173,540	17,169,590	19,108,613
6e	On-site solar generation (kWh)	910,811	806,732	725,237	852,056	952,308

The City of Minneapolis utilizes the same accounting methodology for municipal operations as for the entire community, as outlined in Metric 5. This includes the actions taken by the City to power municipal operations with renewable electricity, as well as the adjusted grid mix factor accounting for the actions of our partner, Xcel Energy, on behalf of their customers.

Significant progress has been achieved in meeting the City's goal of using 100% renewably generated electricity by 2023. The 52 million kWh of Renewable*Connect and 19 million kWh of Community Solar Garden subscriptions maintained the City's renewable electricity percentage at 89% of its total electricity usage. To get closer to the goal, electricity usage will continue to decline as City-owned streetlights are replaced with LED fixtures, newer fire stations are constructed, and general conservation measures continue in enterprise buildings.

In 2021, the City had 60.5% REC ownership over all its electricity usage. The inclusion of subscriptions to community solar gardens is the primary factor that increases the City's renewable percentage to 89% in 2021.

Metric 7 Supporting Data: Renewable Electricity (Local and Directly Purchased)

Metric		2017	2018	2019	2020	2021
7	Renewable Electricity (Local and Directly Purchased)	1.7%	4.0%	5.5%	7.5%	7.4%

Supporting Data		2017	2018	2019	2020	2021
7a	*Windsource* Participants	12,903	13,180	15,315	16,952	17,551
7b	*Windsource* Consumption (MWh)	50,277	42,506	51,112	57,237	70,575
7c	*Renewable*Connect* Participants	836	910	835	864	786
7d	*Renewable*Connect* Consumption (MWh)	4,996	47,929	48,038	61,540	50,181
7e	Solar*Rewards *Community* Subscribers	1,797	3,269	4,511	4,811	5,527
7f	*Solar*Rewards Community* Installed Capacity (MW)	28	73	101	106	112
7g	*Solar*Rewards Community* Installed Capacity (MW) w/in City			0.5	1.5	1.5
7h	*Solar*Rewards Community* Installed Generation (MWh) w/in City			692	2,072	2,160
7i	*Solar*Rewards Community* Subscribed (MWh)	7,787	58,050	93,840	132,493	135,546
7j	*Solar*Rewards*[1] Participants	150	813	937	1,189	1,525
7k	*Solar*Rewards* Installed Capacity (MW)	1.88	7.21	9.04	10.88	14.50
7l	*Solar*Rewards* Generation (MWh)[2]	2,243	3,589	5,258	5,765	10,935
7m	Non-*Solar*Rewards* capacity installed during reporting year (MW	0.4	2.8	1.8	0.5	1.6
7n	Non-*Solar*Rewards* Installed Capacity (MW)[3]	1.0	3.8	5.6	6.1	7.7
7o	Non-*Solar*Rewards* Generation Estimated (MWh)[4]	1,226	4,660	6,868	7,481	9,443

[1]Solar Rewards includes both Solar Rewards and Made in Minnesota Participants.

[2]Systems with less than 40kW AC and Non-Incentive installations may not have production meters, leading to underrepresented MWh.

[3]This is installed capacity of solar. Adding hydro would increase installed capacity by approximately 9MW in every reporting year.

[4]Estimated using a capacity factor of 0.14.

Xcel Energy offers four renewable energy options to Minneapolis customers: Windsource®, Solar*Rewards (Rooftop) and Solar*Rewards Community®, and Renewable*Connect. These four programs cumulatively constitute the percentage of electricity consumed in Minneapolis from local and directly purchased sources.

Windsource is a voluntary energy program that allows customers to purchase some or all of their energy from wind energy sources. The supports additional local renewable energy.

The Renewable*Connect program offers all customers a way to benefit from renewable energy by accessing wind and solar without the need to purchase and install equipment at their property. The Renewable*Connect generation mix is approximately 70% wind and 30% solar energy with contracts. The program became available as a pilot in 2017. Customers are beginning to reach the end of 5-year contracts in the program leading to decreased participation. An expansion of Renewable*Connect has been approved and the wind resources have been built, but the launch of the program has been delayed because the company building the solar resource for the program has made two claims of *Force Majeure* and has not been able to complete the project.

Through Solar*Rewards, individuals install solar panels on their roof so they can produce their own energy. If production exceeds use, the extra energy is added to the grid and the customer receives a credit on their bill. Xcel Energy saw a 33% increase in installed capacity and a 90% increase in production between 2020 and 2021.

The Solar*Rewards Community program (commonly known as community solar gardens) provides residential and business customers the opportunity to participate in solar without attaching an array to their home. Subscribers to a solar garden work directly with a solar developer to access solar energy, while Xcel Energy credits the customer bill for the solar energy produced within their subscription. The Solar*Rewards Community program increased participation by 15%, capacity by 6%, and subscribed energy by 2.3% in Minneapolis between 2020 and 2021.

The following map shows the distribution of Xcel Energy's Solar*Rewards Community program participation across Minneapolis in 2021.

Metric 7e: Xcel Energy

Solar*Rewards Community Participation, 2021