



REGIONAL INDICATORS INITIATIVE: Rochester 2024 Greenhouse Gas Inventory Report





IMPORTANCE OF THIS WORK

Climate change is impacting Minnesotans.

Acting now will help us protect our communities and natural resources.





METRICS



ENERGY (BTUs): electricity, gas, and other heating fuels consumed citywide (subdivided into residential and commercial/industrial)

Source: Energy utilities for gas and electricity, MPCA and U.S. American Community Survey for other fuels



TRAVEL (VEHICLE MILES TRAVELED): on-road distance traveled within city limits

Source: Minnesota Department of Transportation



WASTE (SHORT TONS): household and business trash handled through recycling, burning for energy, and burying in landfills. Citywide numbers are estimated based on county data.

Source: Minnesota Pollution Control Agency



GREENHOUSE GAS EMISSIONS (METRIC TONS CO₂e): citywide greenhouse gas emissions associated with energy, vehicle travel, and waste disposal

Includes: carbon dioxide, methane, nitrous oxide

Excludes: biogenic emissions



regionalindicatorsmn.com

Explore the Regional Indicators methodology



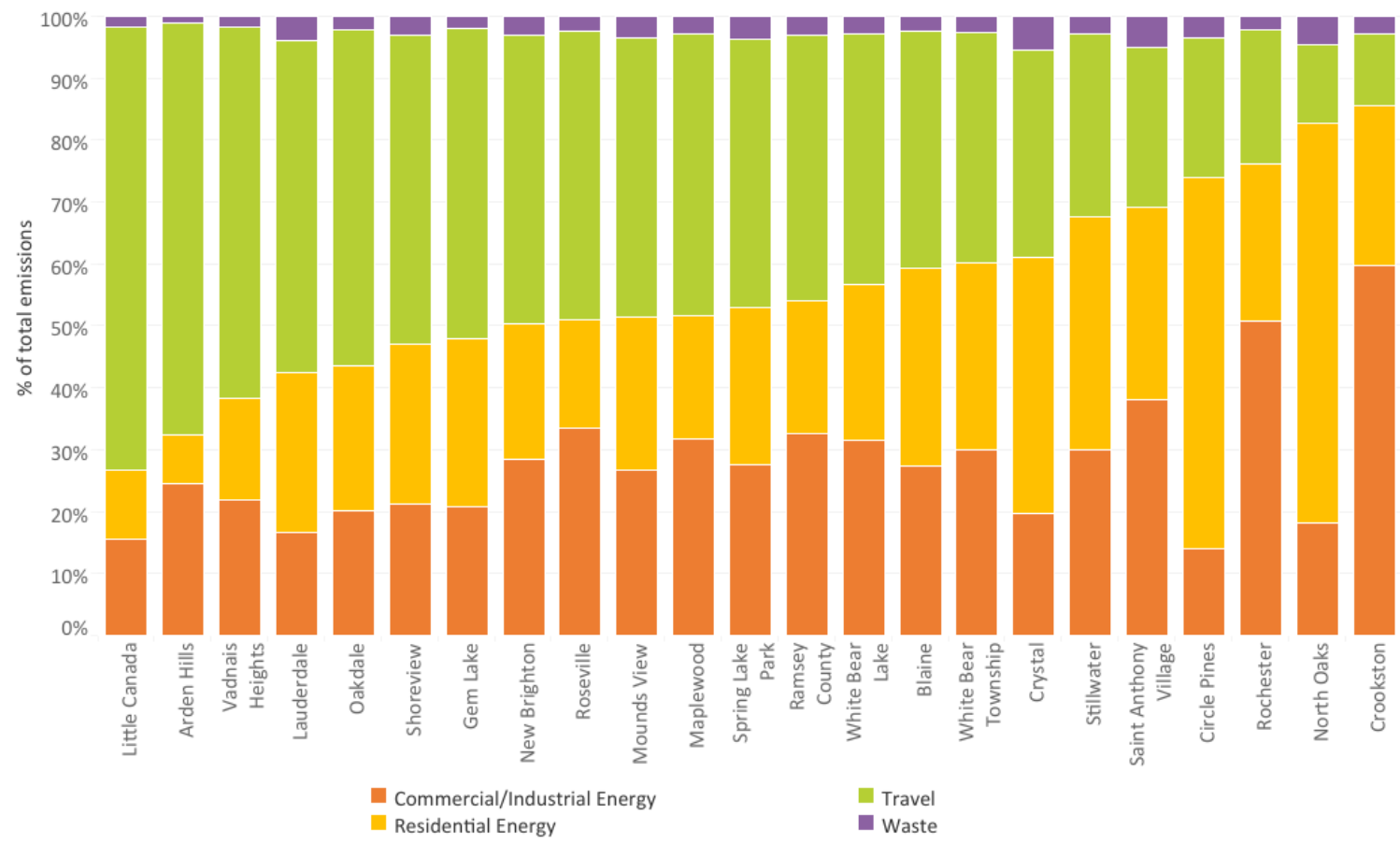
SCOPE

86 communities with 1+ years of complete data

- A** Andover, Apple Valley, Arden Hills, Arlington, Austin
- B** Belle Plaine, Bemidji, Big Lake, Blaine, Bloomington, Brainerd, Brooklyn Center, Brooklyn Park, Burnsville
- C-D** Circle Pines, Columbia Heights, Coon Rapids, Crookston, Crystal, Duluth
- E-F** Eagan, Eden Prairie, Edina, Elk River, Falcon Heights, Fridley
- G-H** Gem Lake, Golden Valley, Grand Marais, Hastings, Hopkins, Hutchinson
- I-L** Inver Grove Heights, Isanti, Jordan, Lake Elmo, Lauderdale, Lexington, Little Canada
- M** Mahtomedi, Mankato, Maplewood, Marine on St. Croix, Minneapolis, Minnetonka, Moorhead, Morris, Mounds View
- N** New Brighton, New Germany, Newport, Nisswa, North Mankato, North Oaks, North Saint Paul, Northfield
- O-R** Oak Park Heights, Oakdale, Orono, Ramsey County, Red Wing, Richfield, Robbinsdale, Rochester, Rosemount, Roseville, Royalton
- S** Saint Anthony Village, St. Louis Park, Saint Paul, St. Paul Park, Shoreview, South St. Paul, Spring Lake Park, Stillwater, Sunfish Lake
- T-W** Vadnais Heights, Victoria, Warren, Wayzata, West Saint Paul, White Bear Lake, White Bear Township, Willmar, Winona, Woodbury



GREENHOUSE GAS EMISSIONS BREAKDOWN

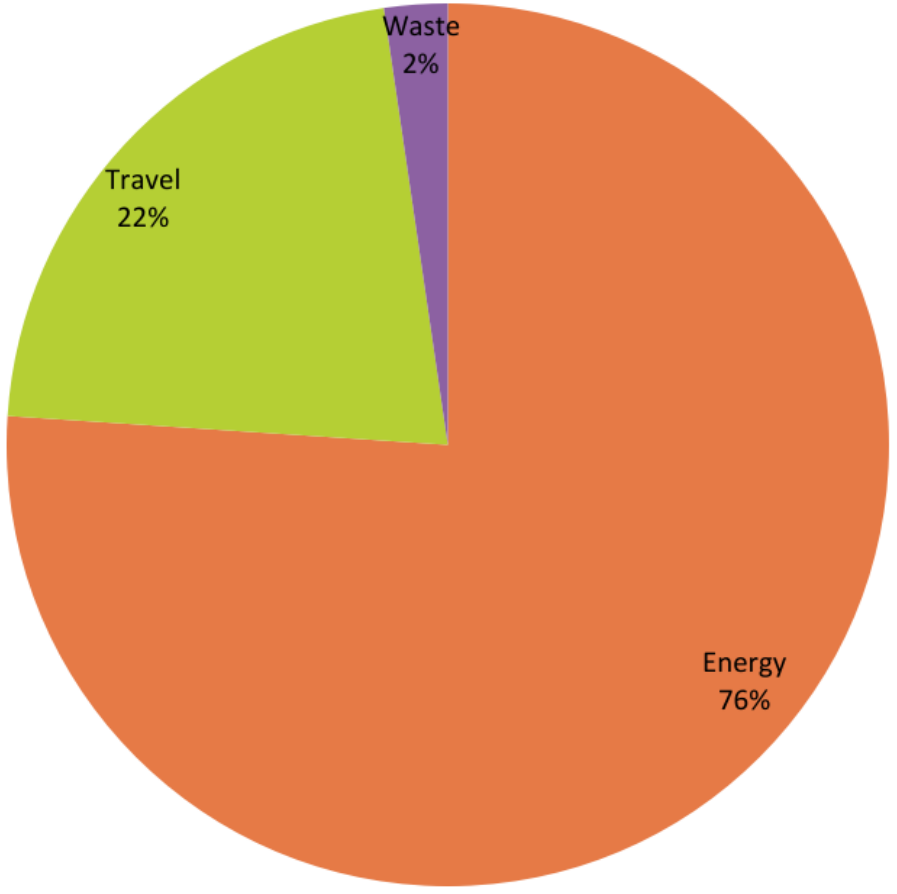


Breakdowns vary by city.
Tracking your own data over time matters most.



GREENHOUSE GAS EMISSIONS

Rochester - 2024



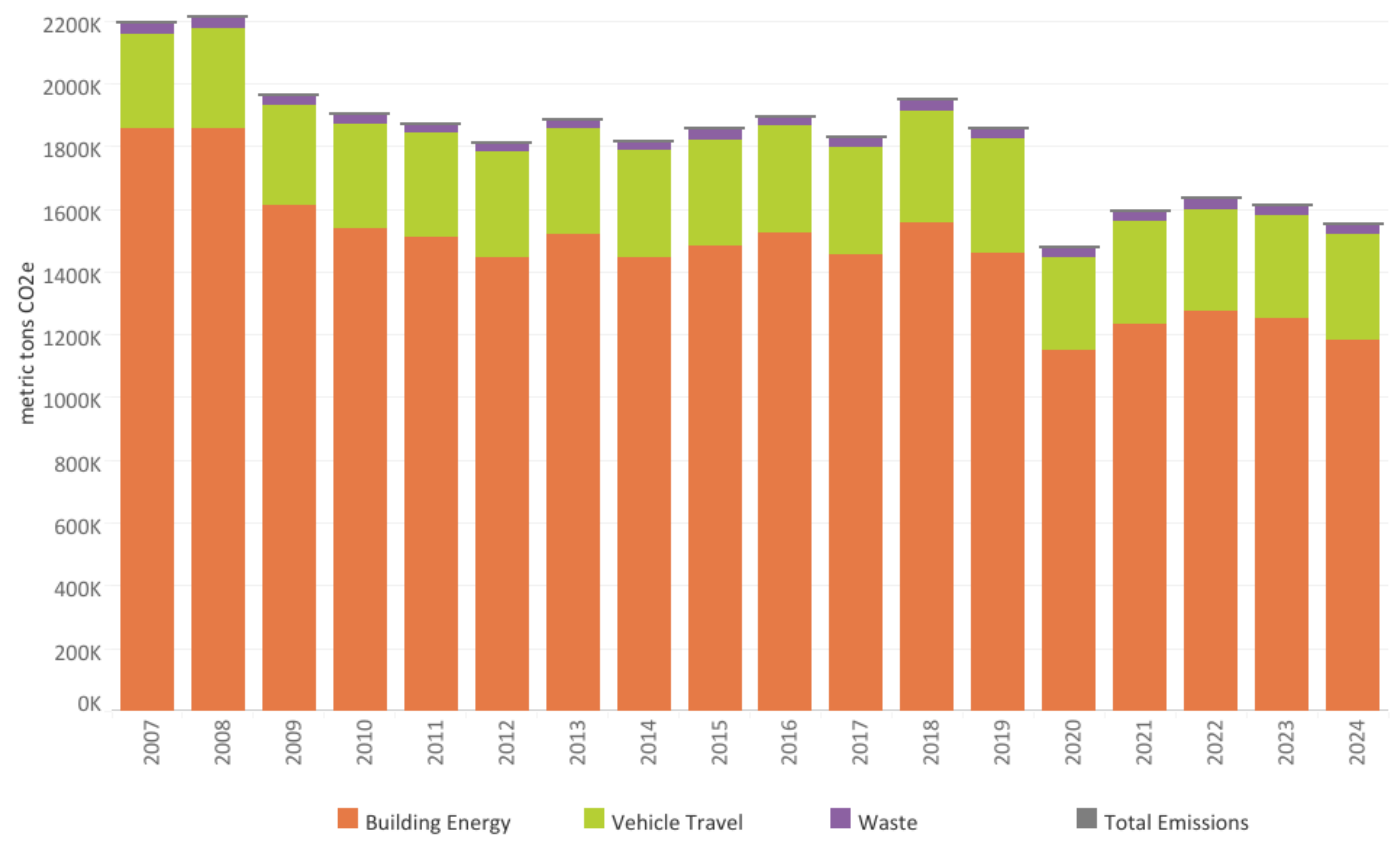
76% of the community's GHG footprint is from the energy used in buildings.

Prioritize building strategies.



GREENHOUSE GAS EMISSIONS

Rochester



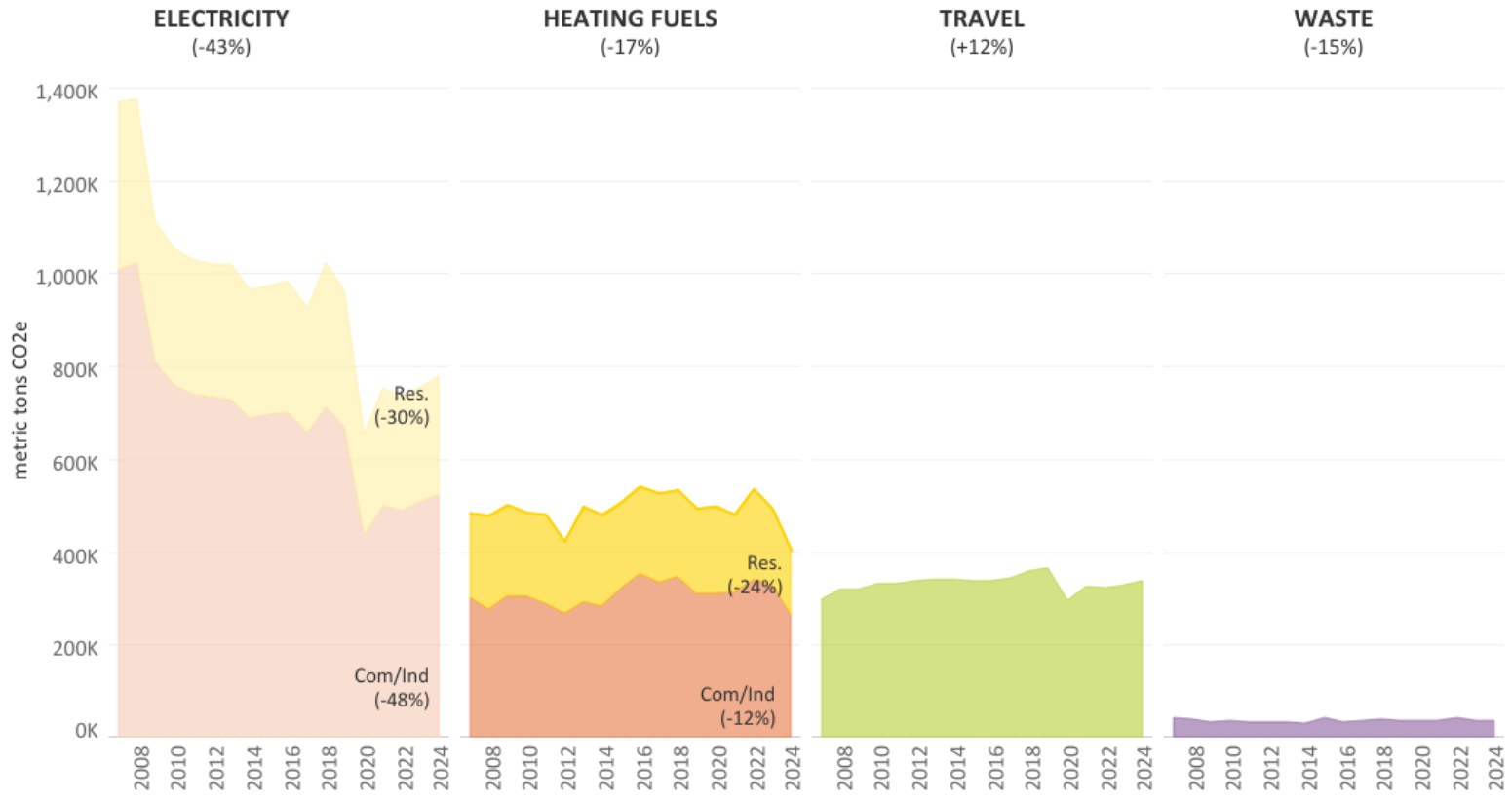
Greenhouse gas emissions have decreased by 29% since 2007.

If Rochester meets its goal of 100% renewable electricity by 2030, the city is also likely to meet its 2030 emissions goal.



GREENHOUSE GAS EMISSIONS

Rochester



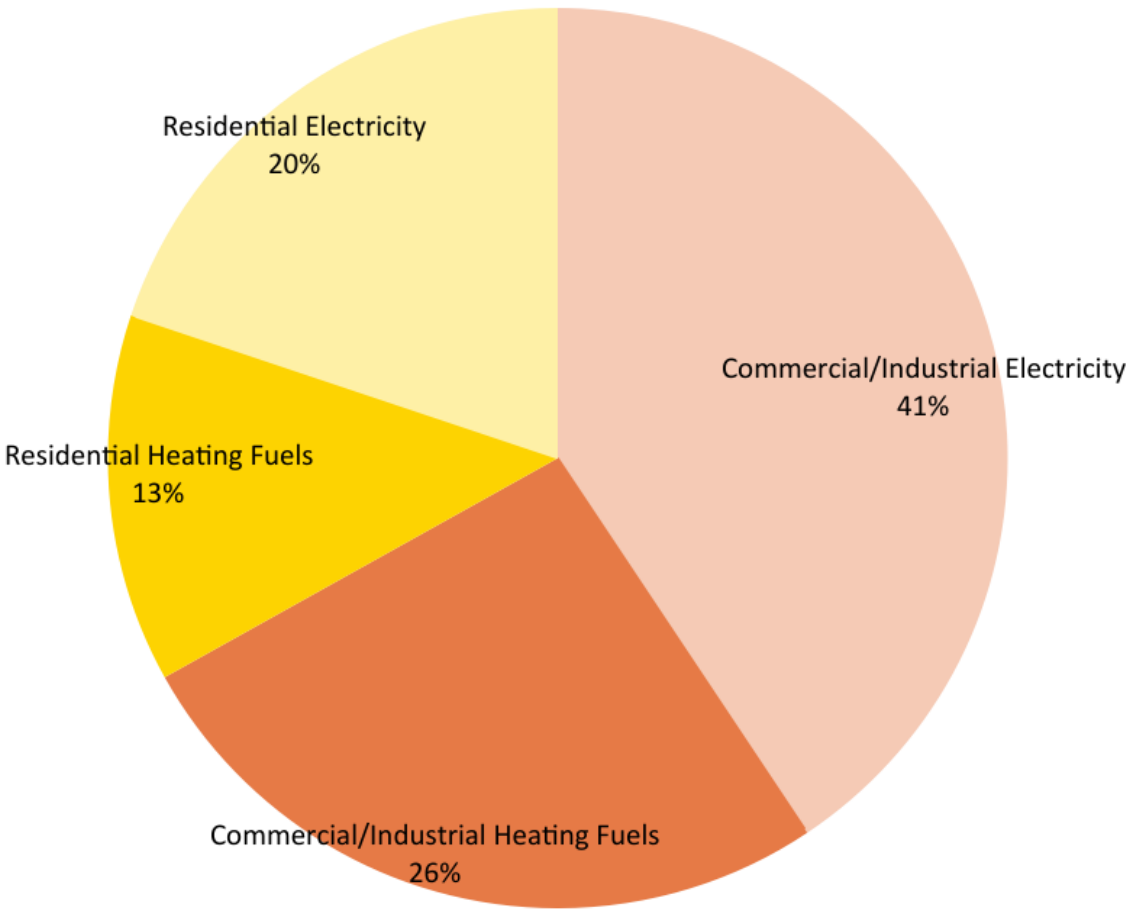
Despite 23% population growth, community emissions have dropped in most sectors.

Keep pushing electricity while finding long-term solutions for gas and travel.



ENERGY EMISSIONS

Rochester - 2024



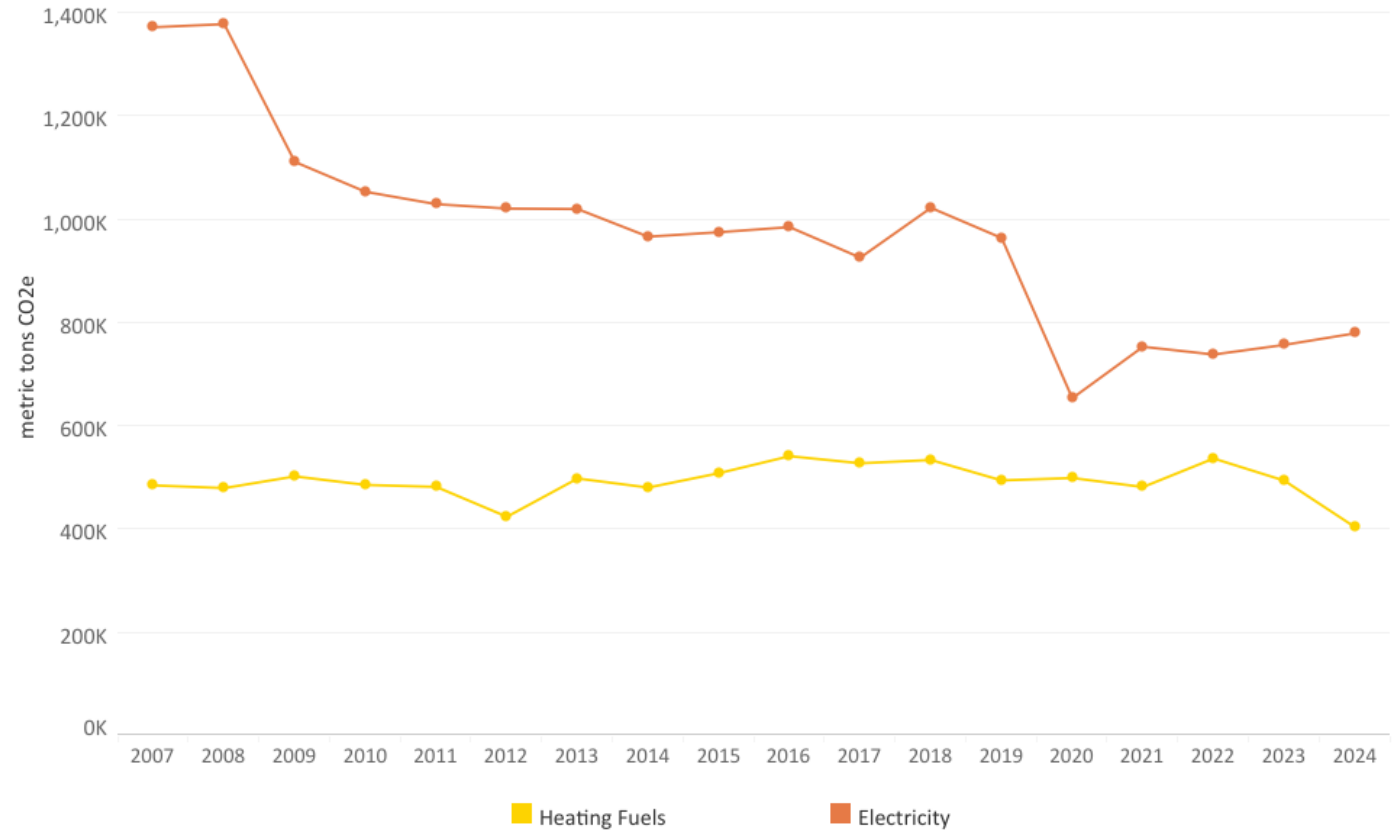
In 2024, more emissions came from electricity than heating fuels.

More emissions came from businesses and industry than homes.



ENERGY EMISSIONS

Rochester

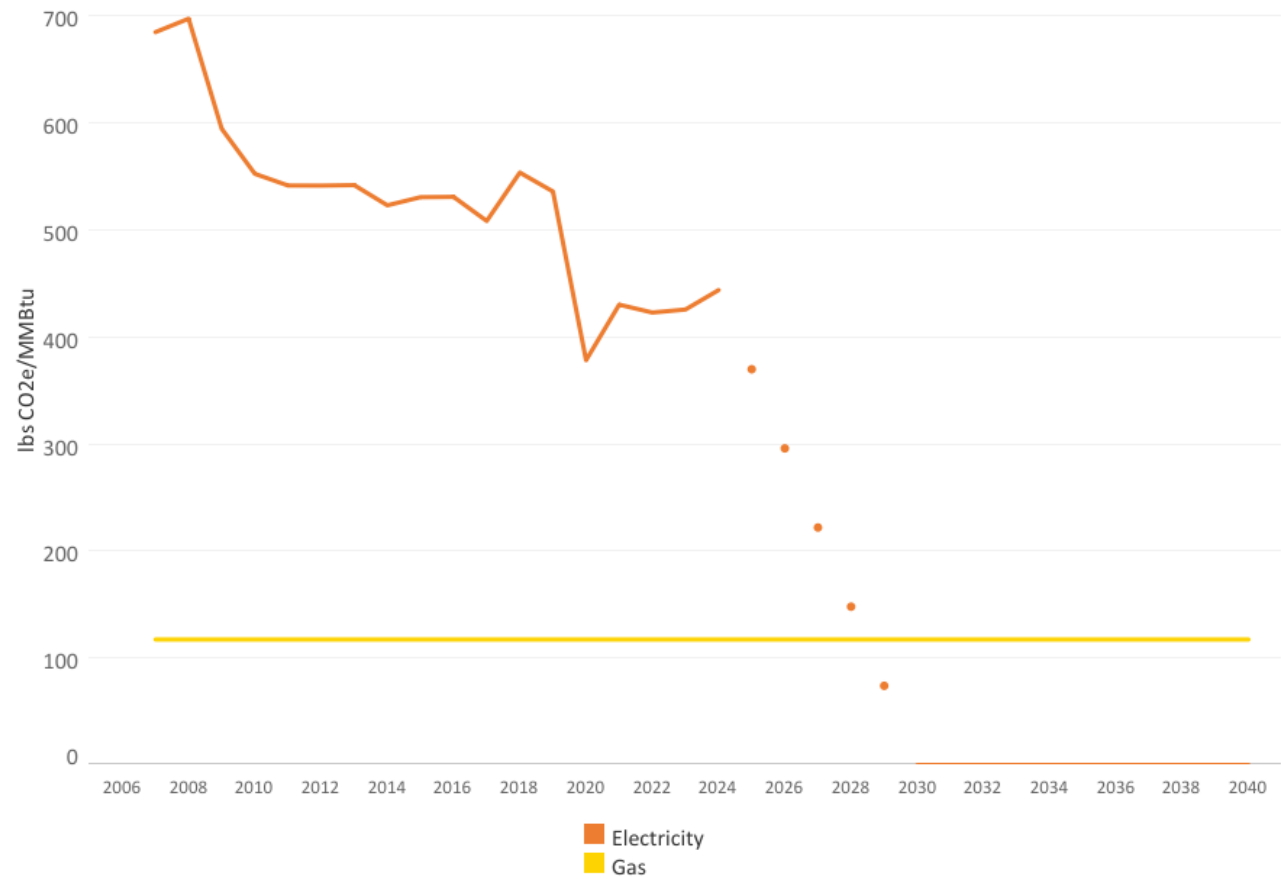


Heating fuel emissions are an increasingly large percentage of total energy emissions.



ENERGY EMISSIONS RATES

Rochester



Rochester will have 100% renewable electricity by 2030.

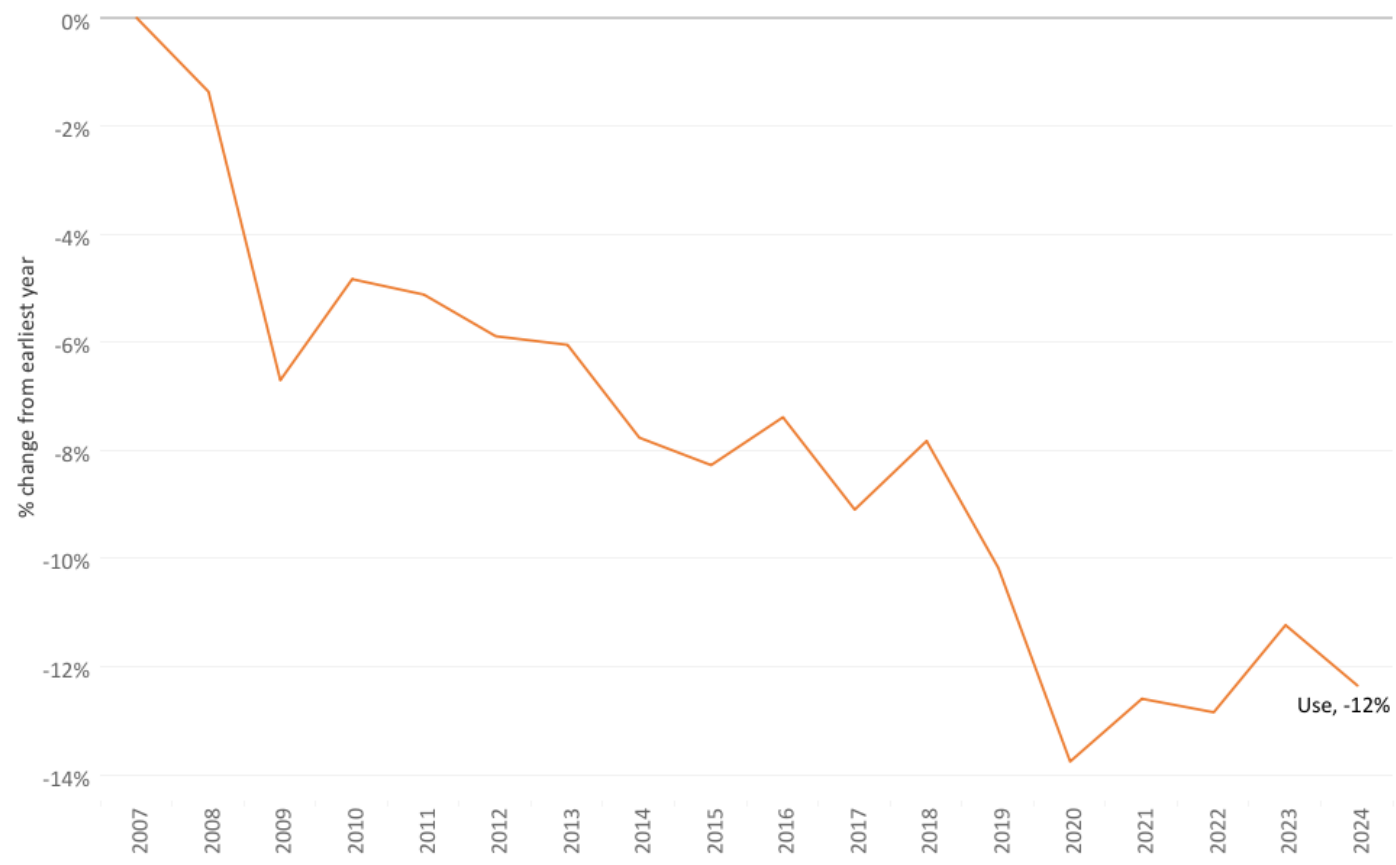
Electric equipment is more efficient than gas equipment, and cleaner over its lifetime.



ELECTRICITY TRENDS

Rochester

Electricity use On Electricity emissions rate Off Total electricity emissions Off

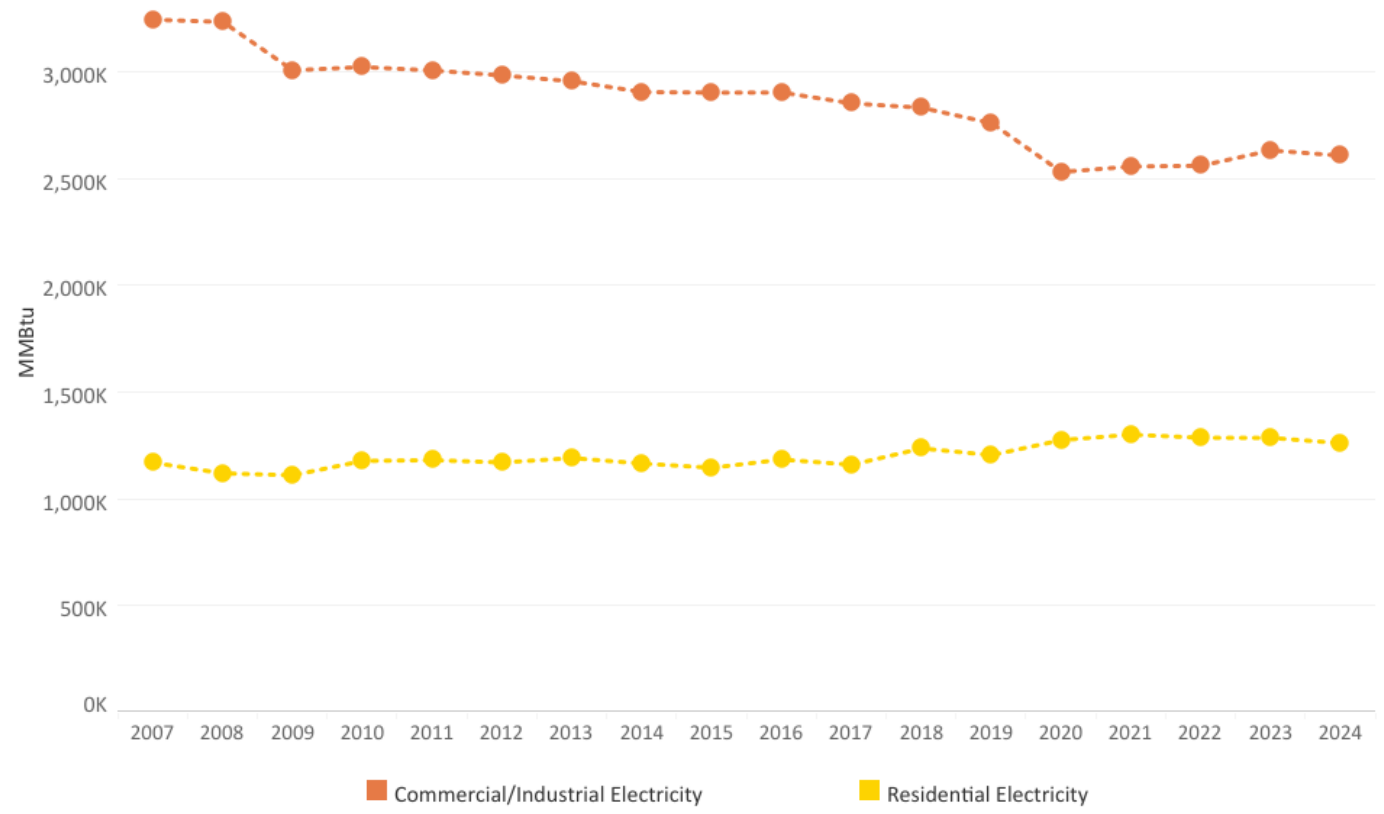


Reduce electricity emissions by using less electricity, from cleaner sources.



ELECTRICITY USE

Rochester



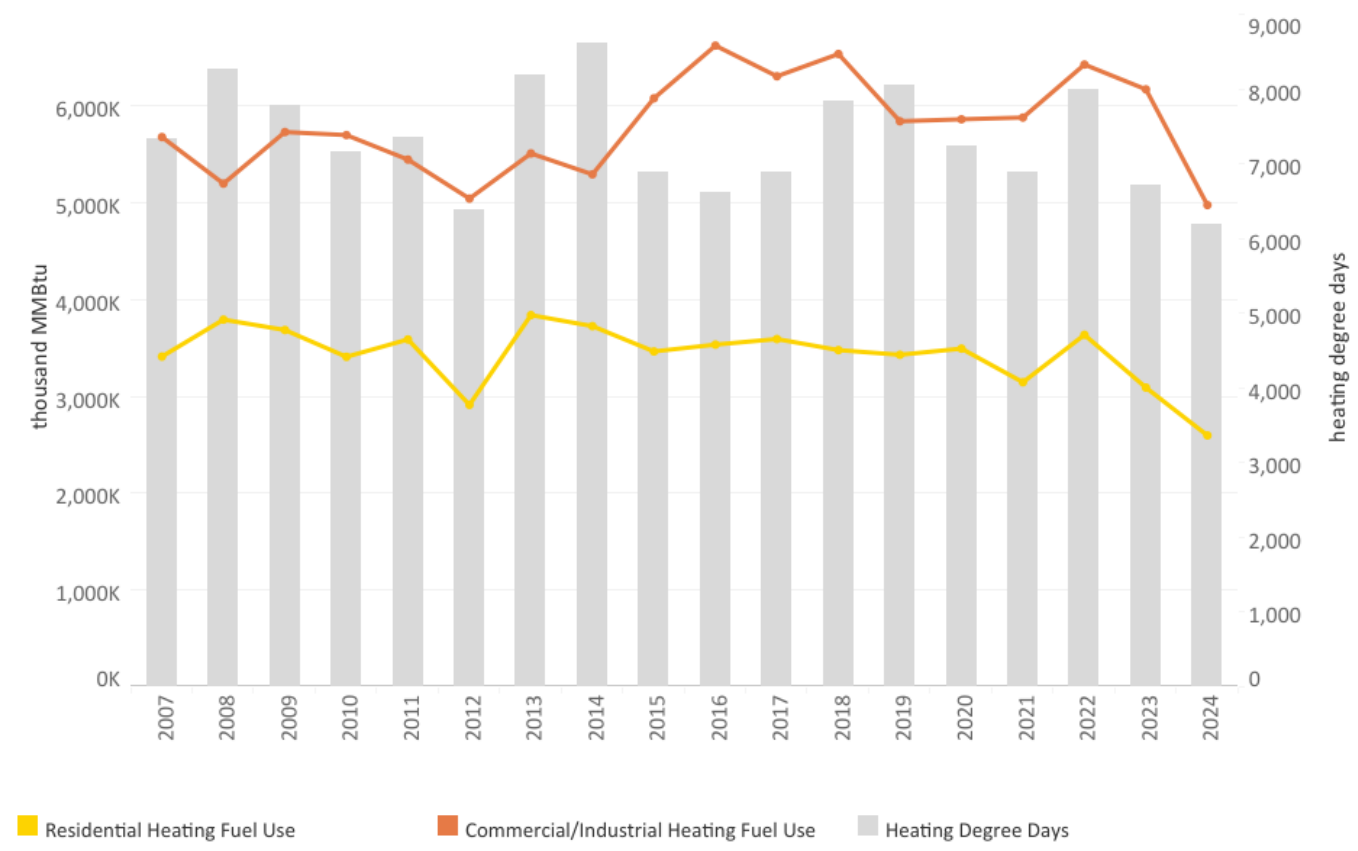
Commercial/industrial electricity use decreased by 20% since 2007, while residential increased by 8% due to bigger population.

Support additional commercial and residential efficiency projects.



HEATING FUEL USE

Rochester



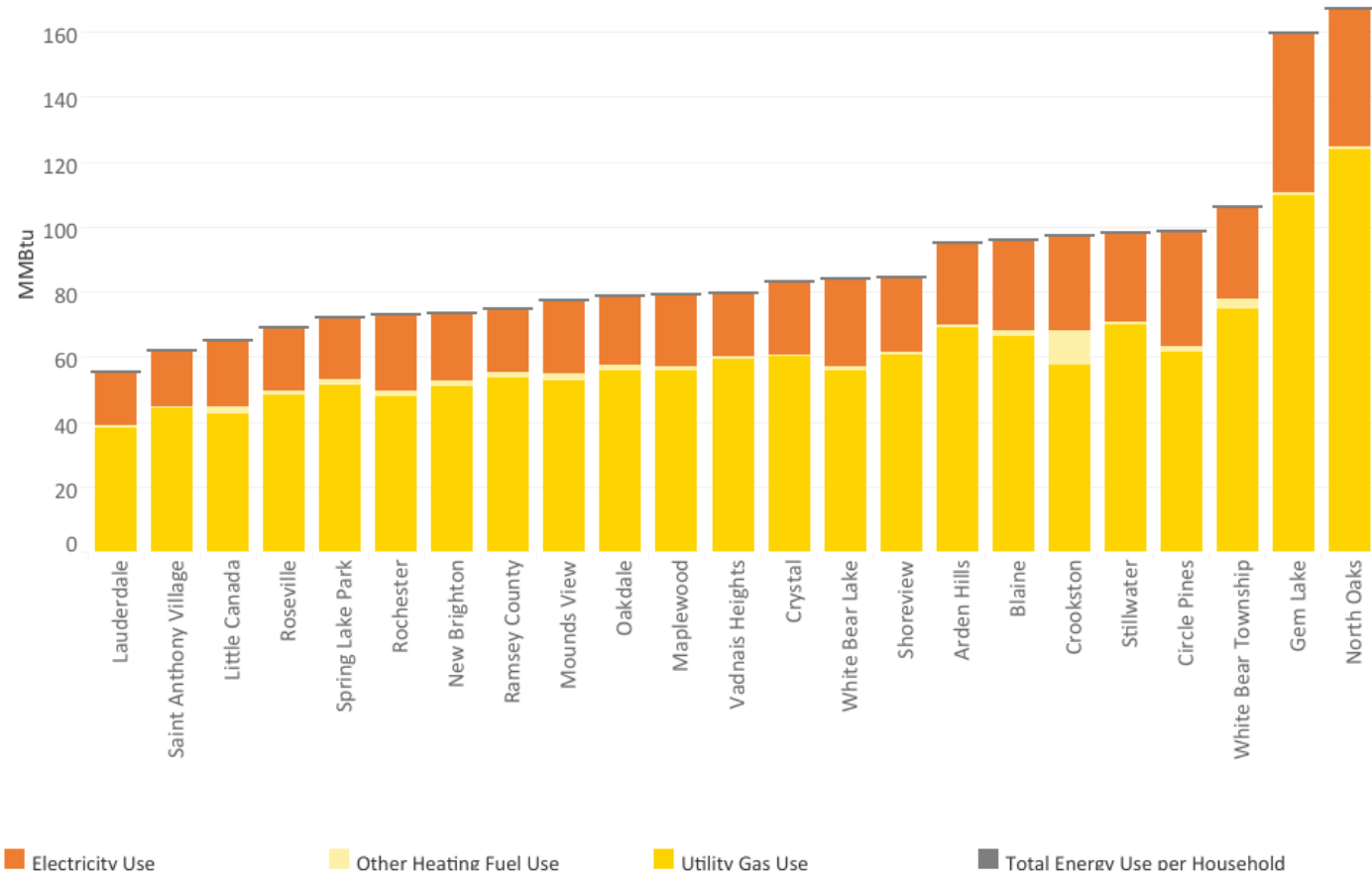
Heating fuel use in homes is weather-dependent.

Weatherize homes.



ENERGY USE PER HOUSEHOLD

All communities - 2024

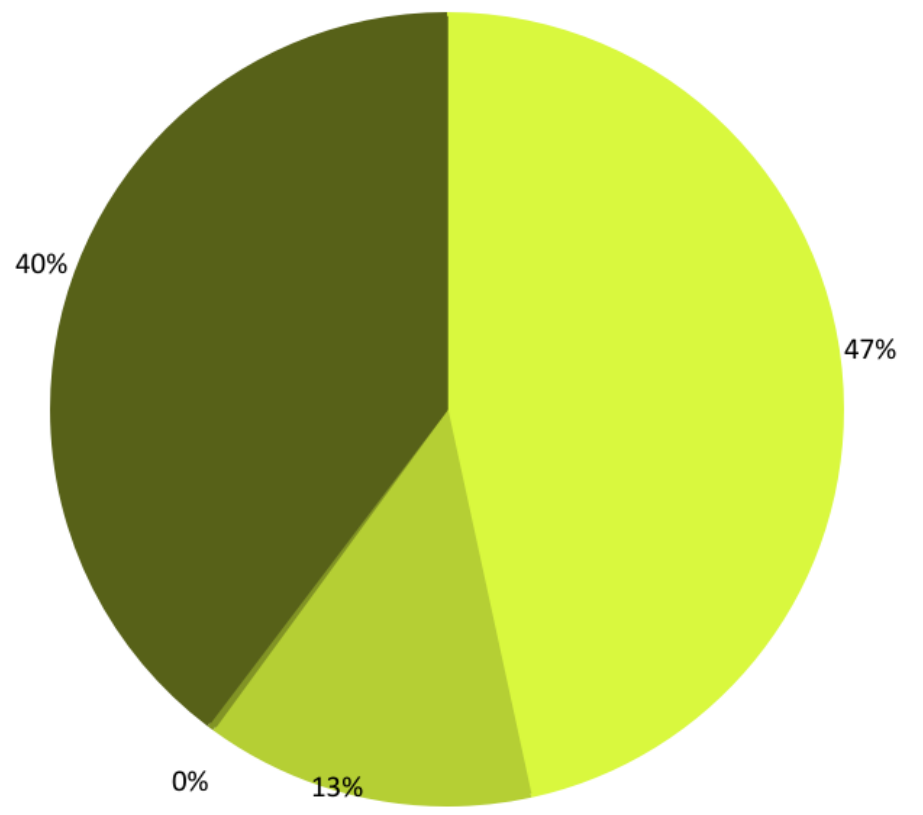


Energy-efficient homes are small, well-insulated, and use electric heat pumps for heating and cooling.



MILES TRAVELED BY ROAD TYPE

Rochester - 2024



Local Roads County Roads State Highways Federal Highways & Interstates

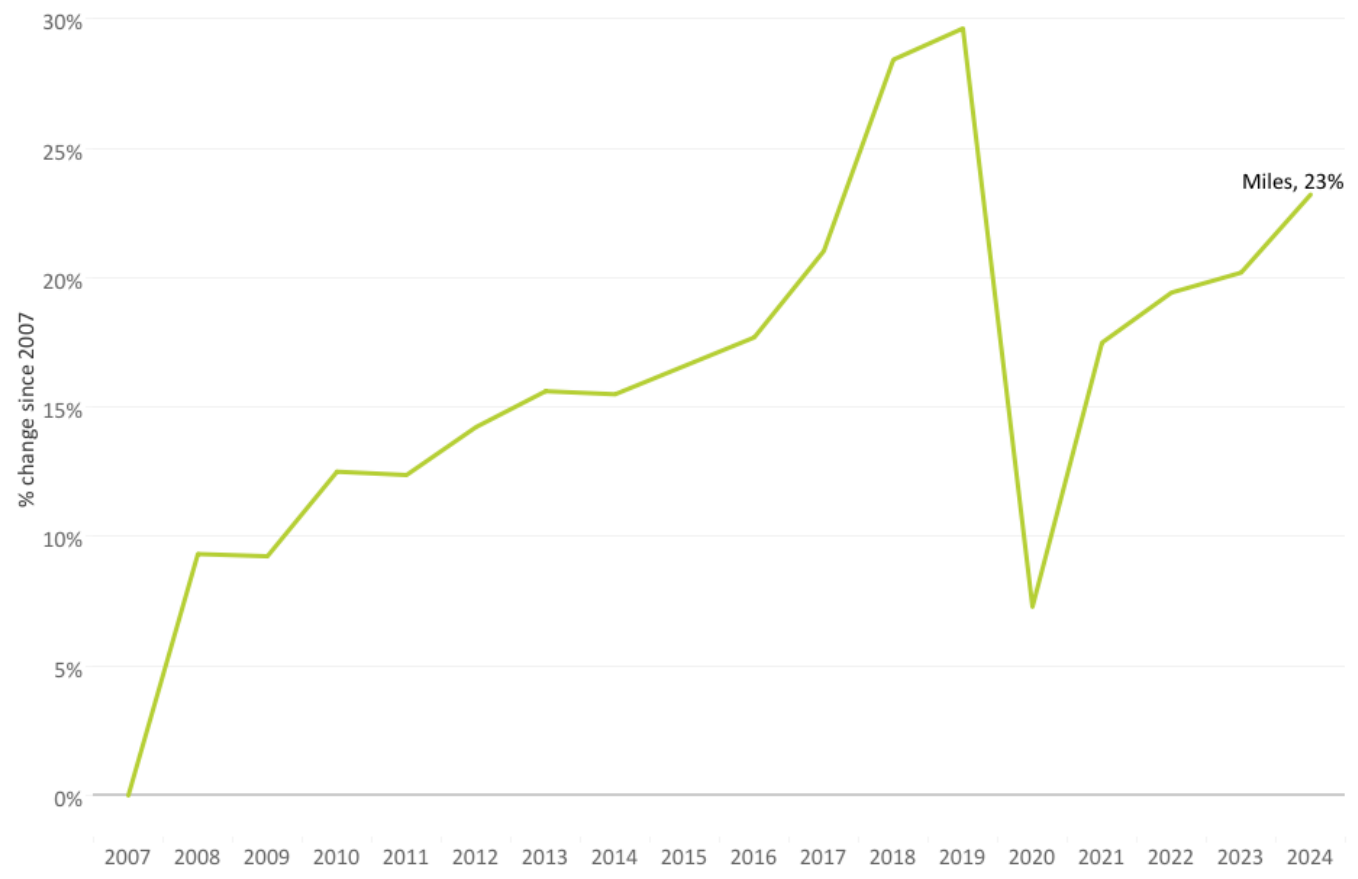
Community action can make a difference in reducing local and pass-through traffic.



VEHICLE TRAVEL

Rochester

Miles traveled On Emissions per mile Off Total travel emissions Off



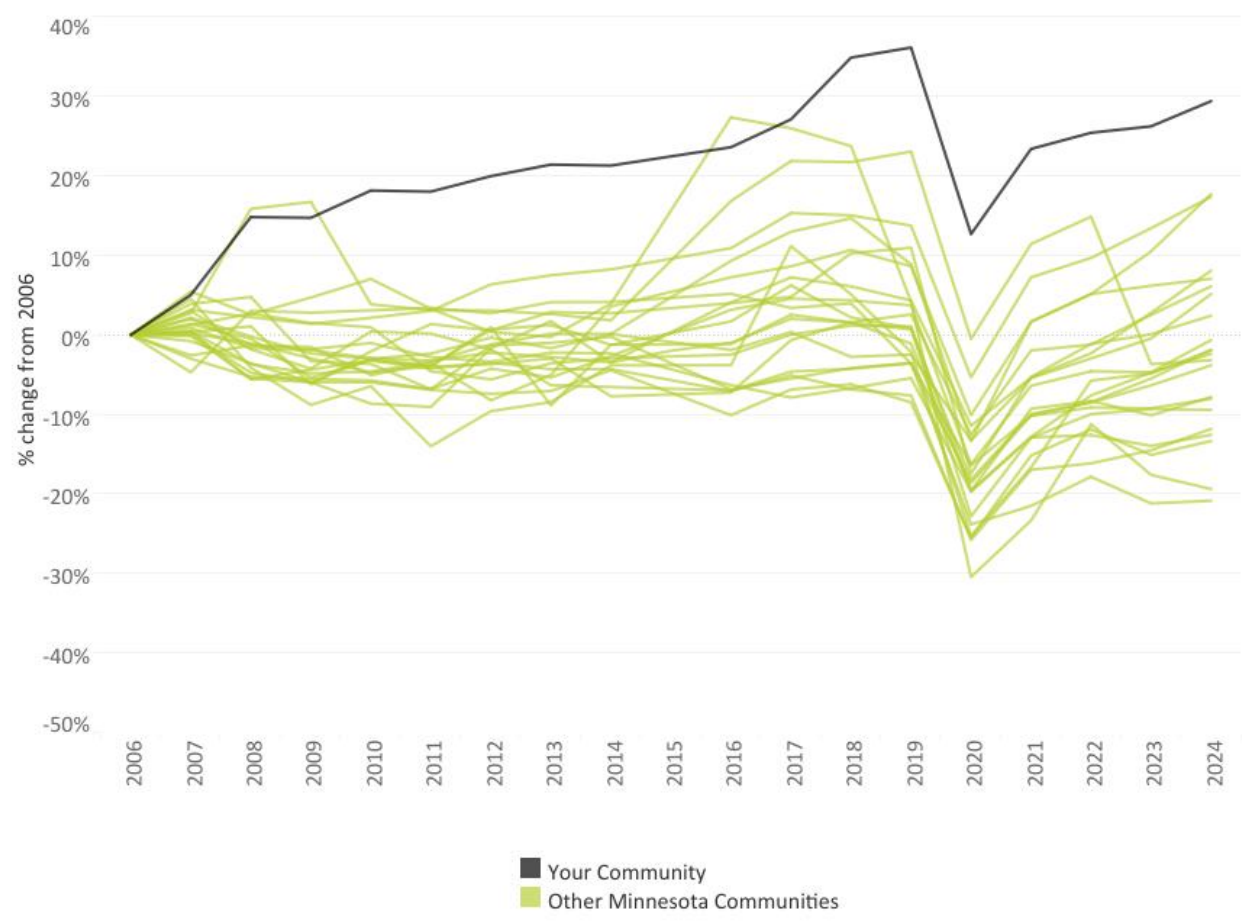
Travel emissions depend on miles traveled, vehicle efficiency, and fuel type.

Accelerate travel reduction and electric vehicle adoption.



CHANGE IN VEHICLE MILES TRAVELED PER RESIDENT

All communities

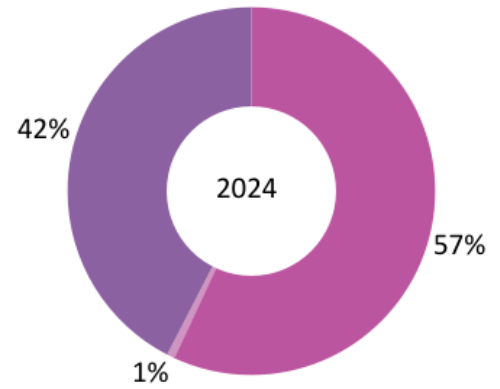
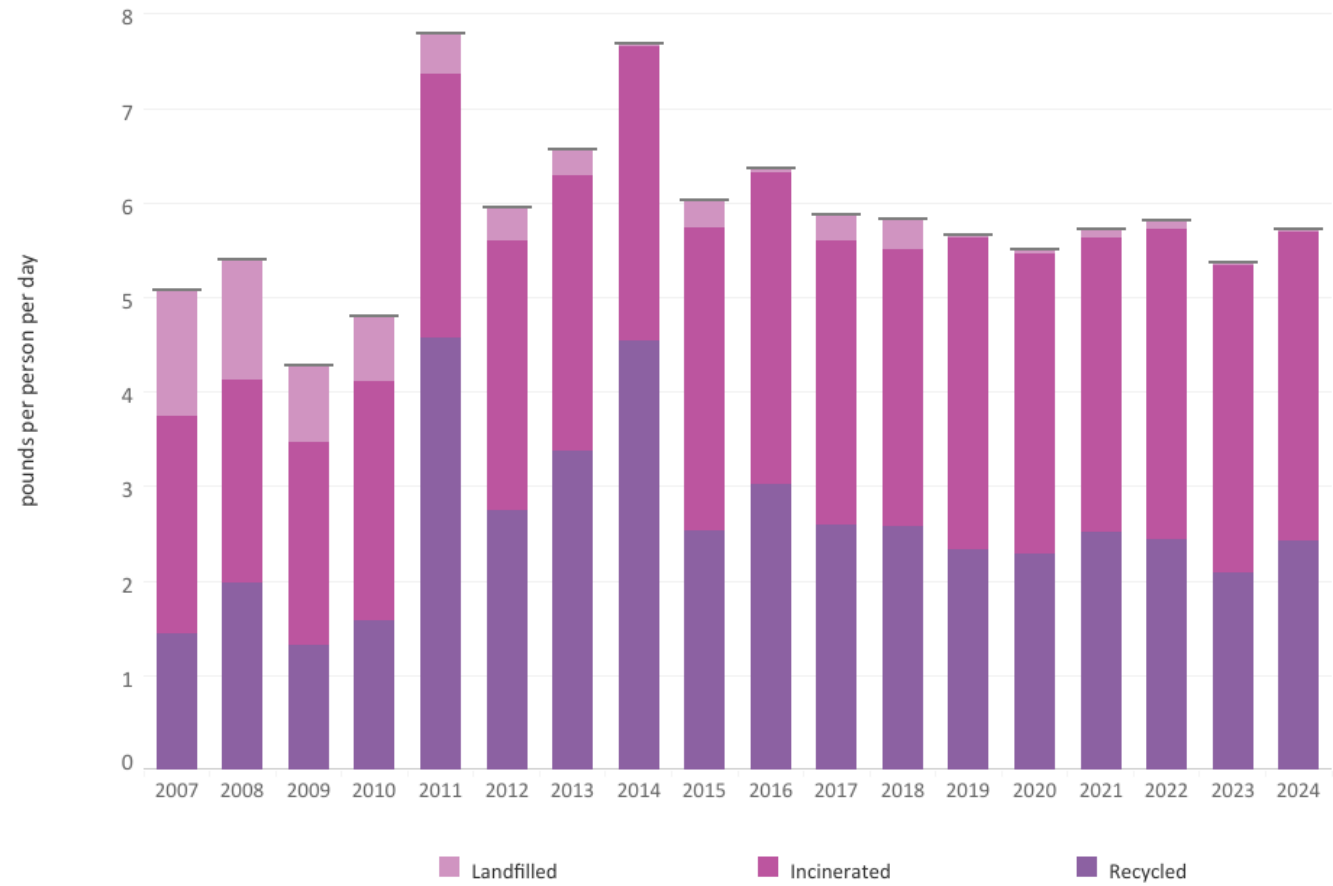


The pandemic reduced travel among Minnesota communities.
Since 2020, travel has increased.



WASTE PER PERSON PER DAY

Rochester



The recycling rate has increased over time.

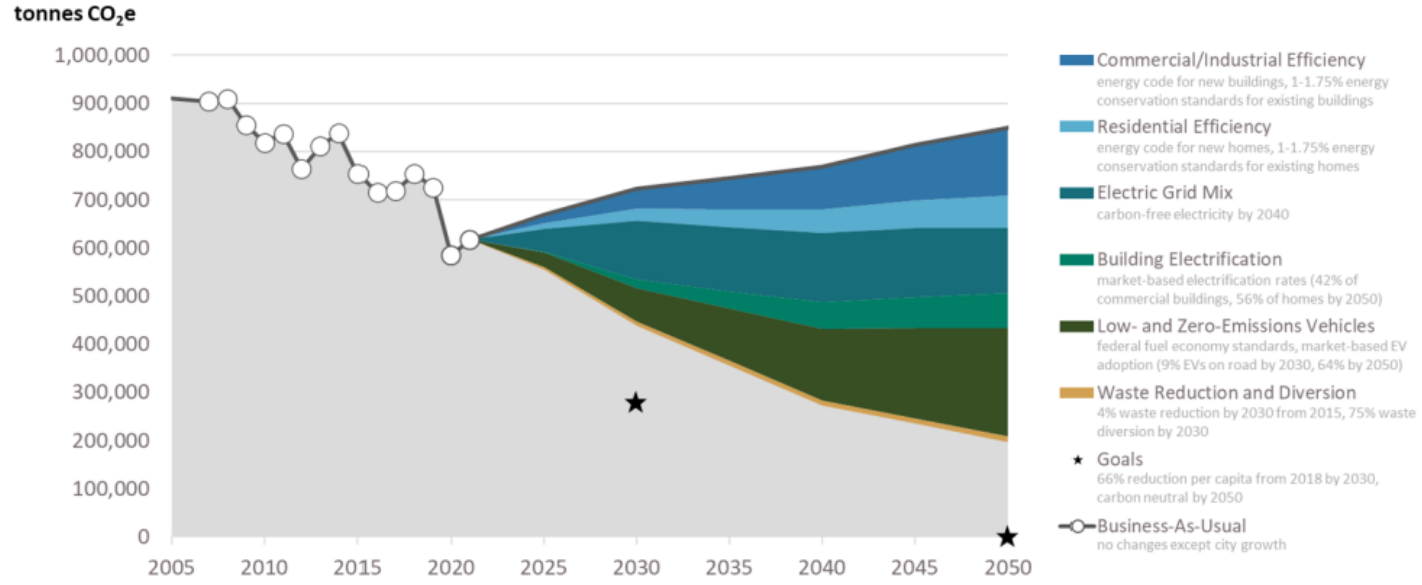
Reduce waste while increasing recycling rates.



CALL TO ACTION

Your community is not alone in this work. To make an even bigger impact:

- Make sure all new buildings are meeting code - and older ones are weatherized.
- Support electrifying homes, businesses, and vehicles.
- Find opportunities to decrease local vehicle travel.





QUESTIONS?

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