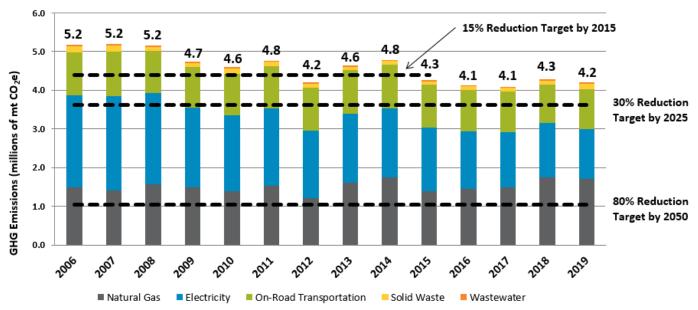
# Minneapolis City of Lakes

# 2019 GHG Emissions Update

# 19% overall GHG reduction since 2006

Natural Gas remains the largest contributor to City's GHG emissions

#### Minneapolis Greenhouse Gas (GHG) Emissions from Citywide Activities



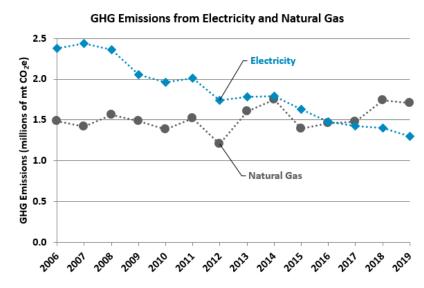
Minneapolis greenhouse gas (GHG) emissions from citywide activities have decreased 19% compared to the 2006 baseline, exceeding the 2015 reduction goal of 15%. Upcoming goals include a 30% reduction by 2025 and an 80% or more reduction by 2050.

GHG emissions decreased 1.8% in 2019 compared to the previous year. Emissions decreases from electricity and natural gas were greater than emissions increases from on-road transportation, solid waste, and wastewater.

## Natural gas emissions continue the recent trend of exceeding electricity emissions

Natural gas has been the City's largest source of GHG emissions over the last three years due to increasing consumption. Electricity emissions were the largest source until 2017, but steadily decreasing consumption paired with increasing renewable generation has resulted in a 45% decrease in electricity emissions since 2006.

Annual temperatures create significant year-to-year variation in the use of natural gas for heating. This noticeable impact shows our building stock is not sufficiently resilient to our winter extremes. By constructing new buildings to the highest energy standards and upgrading existing buildings to modern standards, Minneapolis can save energy and money while reducing greenhouse emissions. Minneapolis adopted in 2020 new sustainable building policies for affordable housing and will adopt in 2021 new policies for City-owned and City-invested buildings that create a pathway to net zero energy buildings within the next decade.



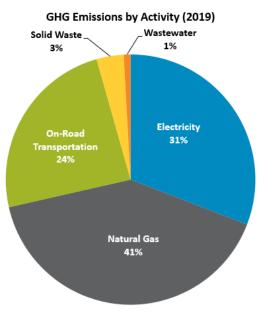
### Dramatic natural gas emissions reductions are necessary to meet City climate goals

Dramatic natural gas emissions reductions are crucial to the City's science-based climate goals, given the scale of emissions from this sector. Accomplishing this requires a two-pronged approach: conservation and gas alternatives.

With continued building growth in the City, reduced gas consumption per building is critical. More aggressive energy codes - via state-wide energy code updates or state legislation to free cities to adopt more energy efficient standards - are key tools for energy reduction in our growing, prosperous city.

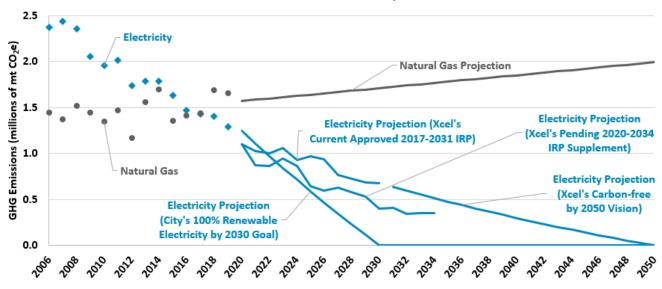
Conservation must also be paired with alternatives to traditional natural gas. Primary amongst these alternatives is electrification of systems traditionally powered by gas. Switching gas appliances such as heating systems, stoves, and water heaters to electric and heat pump alternatives powered by renewable electricity can result in substantial greenhouse gas reductions.

The City has adopted goals to achieve  $\underline{100\%}$  renewable electricity for municipal facilities and operations by 2023 and citywide by 2030. Additionally, Xcel Energy's current 2017-2031 Integrated Resource Plan (IRP), pending 2020-2034 IRP, and carbon-free by 2050 vision all forecast steady electricity emissions reductions. Looking toward 2050, if four emissions sectors are carbon-free (i.e. electricity is 100% renewable, on-road transportation is fully electrified and



carbon-free, and wastewater and solid waste are carbon-free), <u>but</u> natural gas use continues along the current upward trend, emissions overall would only decrease 61%, failing to meet the 80% reduction goal. This highlights the strategic importance of shifting gas end uses to other carbon-free fuels like 100% renewable electricity.

#### **GHG Emissions Scenarios for Electricity and Natural Gas**



## The City's continuing commitment to climate action

A 2018 increase of utility franchise fees created new and expanded City initiatives that assist residents and businesses in implementing clean energy projects. In recent years, the City implemented three new residential building energy disclosure policies - Multifamily Energy Benchmarking (2019), Time of Sale Energy Disclosure (2020), and Time of Rent Energy Disclosure (taking effect in 2021). For these actions and the on-going implementation of the City's <u>Climate Action Plan</u>, the City of Minneapolis was ranked 4<sup>th</sup> nationally for the second consecutive year in the <u>2020 City Clean Energy Scorecard</u> by the American Council for an Energy-Efficient Economy (ACEEE). Powerful climate action also depends on robust, comprehensive accounting, which is why next year's inventory will feature methodology updates and the inclusion of stationary fossil fuels, like fuel oil and generator diesel.

For reasonable accommodations or alternative formats please contact the City Coordinator's Division of Sustainability, Luke Hollenkamp, 612-673-2349 or <a href="mailto:Luke.Hollenkamp@minneapolismn.gov">Luke.Hollenkamp@minneapolismn.gov</a>

People who are deaf or hard of hearing can use a relay service to call 311 at 612-673-3000. TTY users can call 612-673-2157 or 612-673-2626.

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