

Dear Members of the Committee on Energy, Utilities and Technology,

The American Gas Association (“AGA”), founded in 1918, represents more than 200 local energy companies that deliver clean natural gas throughout the United States. There are more than 77 million residential, commercial and industrial natural gas customers in the U.S., of which 96 percent — more than 74 million customers — receive their gas from AGA members. AGA is an advocate for natural gas utility companies and their customers and provides a broad range of programs and services for member natural gas pipelines, marketers, gatherers, international natural gas companies, and industry associates. Today, natural gas meets nearly one-third of the United States’ energy needs.¹ Currently, 52% of U.S. households use natural gas for space heating in their homes.²

Thank you for the opportunity to share why nearly 187 million Americans and 5.8 million businesses use natural gas because it is affordable, reliable, safe and essential to improving our environment. America's natural gas utilities are innovative and committed to reducing greenhouse gas emissions through new and modernized infrastructure and advanced technologies that maintain reliable, resilient, and affordable energy service choices for consumers.

To that end, AGA invests significant resources developing data, studying, analyzing and reporting on the economic, operational, regulatory and technical aspects that must be considered and addressed to maintain our current safe, reliable and economic natural gas utility infrastructure and service. These comments are the fruits of that work and we hope the Committee finds them of assistance.

The Direct Use of Natural Gas is Significantly More Affordable than Electricity

According to the U.S. Department of Energy the direct use of natural gas is 3.3 times more affordable than electricity and significantly more affordable than several other residential energy sources for the same amount of energy delivered.³ AGA analysis⁴ shows that households that use natural gas for heating, cooking and clothes drying save an average of \$1,068 per year compared to homes using electricity for those applications. Natural gas is projected to be half to one-third the price of other fuels through 2050. This affordability is enhanced by successes in energy efficiency. The typical residential natural gas consumer has cut their average fuel use by half since 1970, even as homes have become larger. This is the result of steady improvements in building and appliance energy efficiency, and the positive impacts of gas utility energy efficiency programs, and other measures that have contributed to steady improvements in energy efficiency.

¹ For more information, please visit www.aga.org.

² U.S. Energy Information Administration, available at <https://www.eia.gov/todayinenergy/detail.php?id=55940>.

³ See <https://www.govinfo.gov/content/pkg/FR-2023-08-28/pdf/2023-18532.pdf>.

⁴ American Gas Association, *Comparison of Home Appliance Energy Use, Operating Costs, And Carbon Dioxide Emissions*, (Mar. 2023), <https://www.aga.org/wp-content/uploads/2023/03/Appliance-Cost-and-EmissionsComparison-2022.pdf>

The average Maine natural gas customer would not only significantly reduce their emissions but also save 17% in annual energy costs by switching to an ENERGY STAR-qualified natural gas furnace.⁵

When looking at Maine the 20-year cost of owning an average home with high-efficiency natural gas equipment is \$29,772. The 20-year cost of owning an average home with electric equipment is between \$41,336 and \$44,856 depending on whether the structure would require upgraded service paneling. As a result, natural gas represents savings of between 39% and 51% versus electricity for the energy needs of an average residential customer.⁶ When equipment costs, installation costs, maintenance costs, and energy costs are annualized, the average home with natural gas would save between \$578 and \$754 per year compared to the average electrified home.

The affordability of natural gas continues to enable robust economic development across the country, saving businesses more than half a trillion dollars over the last decade. Building decarbonization strategies that leverage the strengths of the gas distribution system can avoid many of the financial and technical challenges associated with a pathway that relies too heavily on any one technology.

The Natural Gas Distribution System Offers Unique Reliability & Resilience Attributes

On an energy equivalent basis, the gas system provides 2-3 times the energy as that of the electric sector during peak demand. Overreliance on any one source of energy can jeopardize overall energy system reliability and resilience and ultimately result in greater costs for all consumers. Widespread electrification would likely result in significantly higher peak-day electric power asset requirements which often takes the form of higher-emitting resources. Pathways utilizing the existing gas distribution solve this problem by preventing an unnecessary overbuild of the electric system to meet peak demand thereby reducing costs while maintaining reliability.

The natural gas distribution system is an incredibly reliable energy delivery system with unplanned outages affecting only about 1 in 800 natural gas customers per year.⁷ By comparison, electric distribution systems have an average of one outage per year per customer.⁸ In a 2020 analysis, the Government Accountability Office found that compared to electric power outages, the frequency and scope of outages to natural gas consumers appears relatively limited.⁹ Gas

⁵ See <https://www.aga.org/research-policy/resource-library/energy-insights-evaluating-annual-energy-costs-of-energy-star-equipment/>.

⁶ According to AGA internal analysis projecting the impacts of a proposed natural gas moratorium across the state of Maine between 2024-2043.

⁷ Gas Technology Institute, *Assessment of Natural Gas and Electric Distribution Service Reliability*, at 2 (July 19, 2018), <https://www.gti.energy/wp-content/uploads/2018/11/Assessment-of-Natural-Gas-Electric-Distribution-Service-Reliability-TopicalReport-Jul2018.pdf>.

⁸ *Id.*

⁹ Government Accountability Office, *Gas Transmission Pipelines: Interstate Transportation of Natural Gas Is Generally Reliable, but FERC Should Better Identify and Assess Emerging Risks*, GAO-20-658, (Sept. 23, 2020), at 16, <https://www.gao.gov/assets/gao-20-658.pdf>.

interruptions usually did not result in a complete loss of service to affected consumers however the scope of electric outages can be extensive, affecting millions of consumers for days at a time.¹⁰ Total U.S. natural gas demand hit a new record on January 15, 2024, according to preliminary estimates from S&P Global Commodity Insights. In fact, estimated demand on January 14, 15, and 16 all look to exceed the prior record set in December 2022 during Winter Storm Elliot.¹¹ This level of service is attributable to the resiliency of the natural gas infrastructure based on years of strategic investment in these distribution systems' safety and reliability. The availability of natural gas, and natural gas infrastructure, is crucial to ensure the comfort and safety of communities even on the coldest days of the year.

Gas Utility Infrastructure is Vital to Achieving Emissions Reductions

To achieve lasting, affordable, and reliable deep emissions reductions the existing natural gas distribution infrastructure that Maine residents have already invested millions of dollars in must be part of the solution. Maine can achieve significant emissions reductions by working with its natural gas utilities across the state to accelerate the use of tools available today, including high-efficiency natural gas applications, renewable gases, methane reduction technologies, and enhanced energy efficiency initiatives.¹²

Natural gas utilities are recognized as leaders in the energy industry for their successful history of reducing emissions spending almost \$4.3 million a day on energy efficiency programs.¹³ This exceptional record can be traced to gas utilities continuing to make safety their top priority and remaining deeply committed to systematically upgrading infrastructure through risk-based integrity management programs. Methane emissions from the distribution systems owned and operated by local natural gas utilities have declined 70 percent between 1990 and 2021 according to the U.S. EPA, even as the system continues to grow and add more customers.¹⁴

Pathways that utilize natural gas and the vast utility delivery infrastructure offer opportunities to incorporate renewable and low-carbon gases, provide optionality for stakeholders, help minimize customer impacts, maintain high reliability, improve overall energy system resilience, and accelerate emissions reductions. The ability of natural gas infrastructure to store and transport large amounts of energy to meet seasonal and peak day energy use represents an important and valuable resource that needs to be considered when building pathways to achieve lasting emissions reductions. Continued utilization of natural gas and the vast utility delivery infrastructure can increase the likelihood of successfully reaching Maine's environmental, economic, and energy infrastructure goals.

¹⁰ *Id.* at 12, 15.

¹¹ See <https://www.aga.org/research-policy/resource-library/natural-gas-market-indicators-special-edition/>

¹² To learn more about how AGA members can help the communities they serve achieve net-zero emissions, See ICF & American Gas Association, *Net-Zero Emissions Opportunities for Gas Utilities*, (Feb. 2022), <https://www.aga.org/research/reports/net-zero-emissions-opportunities-for-gas-utilities/>.

¹³ See <https://www.aga.org/research-policy/resource-library/natural-gas-utility-efficiency-programs/>

¹⁴ U.S. Environmental Protection Agency, *Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990-2021* (Nov. 8, 2023), <https://www.epa.gov/ghgemissions/inventory-us-greenhouse-gas-emissions-and-sinks-1990-2021>.

There are No Documented Health Hazards Associated with Gas Stoves

The gas utility industry, in collaboration with research organizations and appliance manufacturers, continues to develop information and provides education for consumers, employees, fuel suppliers, and regulators about the safety of gas cooking appliances and ways to reduce cooking process emissions from impacting indoor air quality. These groups are heavily engaged in promoting the safe use of natural gas appliances through the development of standards for the design of natural gas appliances, participating in building safety codes and standards proceedings, and federal agency reviews.

There are no documented risks to respiratory health from the proper use of natural gas stoves by government agencies and advisory committees responsible for protecting residential consumer health and safety, including the Federal Interagency Committee on Indoor Air Quality and the Consumer Product Safety Commission.

Proper ventilation when cooking with any energy source is the most important step you can take to mitigate cooking related air quality. Cooking activities by themselves, (e.g., grilling, frying, broiling, baking) are a source of indoor air emissions, including particulate matter. This is why many jurisdictions require kitchen exhausts in all new homes, regardless of energy source, gas or electric.

Conclusion

AGA appreciates the opportunity to share how the economic, operational, regulatory and technical characteristics of the natural gas energy delivery network can help provide a safe, reliable, and affordable energy source well into the future.

Respectfully submitted,

American Gas Association