

Via Electronic Filing at: <a href="https://de.gov/dnreccomments">https://de.gov/dnreccomments</a>
Via Email to: <a href="mailto:DNRECHearingComments@delaware.gov">DNRECHearingComments@delaware.gov</a>

August 6, 2025

Gregory Patterson Secretary Delaware Department of Natural Resources and Environmental Control 89 Kings Highway SW, Dover, Delaware 19901

Re: Delaware Proposed Building Code Regulations Docket #: 2025-R-CCE-0008

Secretary Patterson,

The American Gas Association (AGA) respectfully submits these comments on the Delaware Department of Natural Resources & Environmental Control's (Department) proposal, "Regulations for State Energy Conservation Code." AGA and its members are committed to improvements in energy efficiency, consumer energy affordability, access to reliable energy, and greenhouse gas emissions reductions.

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 advocates 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 more than one-third of the U.S.' energy needs.<sup>1</sup>

<sup>&</sup>lt;sup>1</sup> For more information, please visit www.aga.org.

Natural gas pipelines are an essential part of the nation's energy infrastructure. Indeed, natural gas is delivered to customers through a safe, approximately 2.7-million-mile underground pipeline system, including 2.3 million miles of local utility distribution pipelines, 100,000 miles of gathering lines, and 300,000 miles of transmission pipelines providing service to more than 189 million Americans.

Distribution pipelines are operated by natural gas utilities, or "local distribution companies (LDCs)." The gas utility's distribution pipes are the last, critical link in the natural gas delivery chain that brings natural gas from the wellhead to the burner tip. AGA member utilities are the "face of the gas industry," embedded in the communities they serve, and interact daily with customers and the state regulators who oversee pipeline safety locally. The distribution industry takes very seriously the responsibility of continuing to deliver natural gas to our families, neighbors, and business partners as safely, reliably, and responsibly as possible.

AGA supports the Department's overall goal of reducing greenhouse gas ("GHG") emissions through building codes and standards that are technologically feasible, economically justified, and follow federal and state statutory requirements.

Natural gas utilities have a proven track record of reducing emissions. In fact, AGA and its members complement building codes and standards by pursuing a customer-centered approach to energy efficiency improvements, focusing on those most vulnerable to energy costs. Indeed, AGA and its members have been at the forefront of efficiency gains, from the delivery of natural gas to its end use, achieving significant benefits for consumers, environmental improvements, and economic contributions. These industry efforts have led to tangible results: as the number of natural gas consumers has grown, natural gas use in the residential, commercial, and industrial natural gas sectors has been virtually unchanged. This is the direct result of energy efficiency improvements, including tighter building envelopes, more efficient appliances and equipment, behavioral changes in energy consumption, and the effectiveness of natural gas utility efficiency programs. This continual improvement in energy efficiency has led to a decline in overall carbon dioxide emissions as consumers use natural gas more efficiently.

#### Natural Gas Providers Have a Proven Track Record of Reducing GHG Emissions.

Local Distribution Companies have a proven track record of reducing GHG emissions. AGA and its members are committed to reducing GHG emissions through smart innovation, new and modernized infrastructure and advanced technologies that maintain reliable, resilient, and cost-effective consumer energy service choices. With direction and guidance from policymakers and regulators, the natural gas utility industry continuously invests in modernizing the nation's natural gas delivery infrastructure to distribute safe, reliable, and cost-effective energy and improve customer efficiency.

Climate change is a defining challenge across the globe, and natural gas, natural gas utilities, and the delivery infrastructure play an essential role in meeting our nation's GHG emissions reduction goals. As companies continue to modernize natural gas infrastructure and connect homes and businesses to the system, new opportunities arise to achieve low-cost GHG emissions reductions by leveraging new and existing natural gas infrastructure, advanced technologies, and the nation's abundant natural gas resources.

In February 2022, AGA published a study titled "Net-Zero Emissions Opportunities for Gas Utilities" ("AGA's Net-Zero Study") to provide a comprehensive and rigorous analysis demonstrating the multiple pathways that exist to reach a net-zero future, and the role natural gas, gas utilities and delivery infrastructure will play in advancing decarbonization solutions. The study presents a national-level approach that leverages the unique advantages of gas technologies and distribution infrastructure and the foundational role of natural gas energy efficiency. The study underscores the range of scenarios and technology opportunities available as the nation, regions, states, and communities develop and implement ambitious emissions reduction plans. The key findings in the study include:

<sup>&</sup>lt;sup>2</sup> "Net-Zero Emissions Opportunities for Gas Utilities," AGA, February 8, 2022, available at aga-net-zeroemissions-opportunities-for-gas-utilities.pdf (last visited January 18, 2024). ("AGA's Net-Zero Study").

- 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 net-zero GHG emissions goals.
- Continued utilization of natural gas and the vast utility delivery infrastructure can increase the likelihood of successfully reaching net-zero targets while minimizing customer impacts.
- The U.S. can achieve significant emissions reductions by accelerating the use of tools available today, including high-efficiency natural gas applications, renewable gases, methane reduction technologies, and enhanced energy efficiency initiatives.
- Large amounts of renewable and low-carbon electricity and gases, and negative emissions technologies, will be required to meet an economy-wide 2050 net-zero target.
- Supportive policies and regulatory approaches will be essential for natural gas utilities to achieve net-zero emissions.

Natural gas and its direct use in homes and businesses has been a cornerstone of America's energy economy for more than a century and will be needed in the future. Today, hundreds of millions of Americans rely on natural gas to heat their homes, power their businesses, and manufacture goods. An emphasis on climate change and reducing emissions has complemented the natural gas utility industry's focus on safety and reliability and enabled a steep decline in methane emissions. These commitments continue, and as our nation moves towards a lower-carbon economy and embraces new fuels and technologies, the natural gas

utilities are ready to meet these changes and will remain foundational to the country's future.

## **Building Energy Consumption Standards Must Be Fuel Neutral and Based on Total Energy Consumption**

The Department's proposal must be fuel neutral and based on the total energy consumption of a building, not merely the building envelope. A fuel neutral approach maximizes the electric and gas systems to achieve efficient, cost-effective, and reliable GHG reductions for the building sector.

A fuel neutral approach would permit flexibility and allow the inclusion of different energy sources, such as renewable natural gas and hydrogen. In addition, a fuel neutral approach ensures the continued utilization of existing infrastructure, while minimizing impacts to end users. There are many circumstances in which the use of on-site natural gas can help with the reduction of a building's fossil fuel-generated energy consumption. Excluding the consumption of electricity that is generated by fossil fuels off-site will not further the Department's goals.

The decision to disregard energy consumption produced with fossil fuels off-site is contrary to the Department's goals. It fails to consider an important aspect of the problem it is trying to solve. Encouraging electrification and discouraging onsite fuel use will not increase the overall energy efficiency of the buildings and would not result in a reduction of harmful environmental emissions. Exchanging on-site fossil fuel generated energy for reliance on the electric grid, which may still be generating energy with fossil fuels, doesn't necessarily lead to a reduction in emissions of GHGs.

To argue otherwise, the Department must assume that Delaware will have a zero emissions electric grid in the future. However, the Department fails to explain the basis for this assumption along with when or how it assumes that the transition will take place.

## The Department Should Fully Consider the Potential Impacts of the Proposal on the Entire Energy System and Customers

The Department should examine the impacts its proposal will have on the entire energy system, including utilities, end-use residential customers, and the industrial sector. Discouraging use of natural gas, via the proposal, from a large

segment of buildings, will impact existing and future natural gas and electric utility customers. For example, electrifying buildings can lead to additional infrastructure costs if it becomes necessary to add additional generation capacity, electric transmission, and distribution infrastructure to meet new peaks in demand. The proposal fails to address how the fuel switching from natural gas end-use equipment to electric will significantly impact the peak day electric demand and the infrastructure requirements to serve the new peak day demand. Furthermore, the need for the significant build out of the electric grid has not been fully considered. If buildings are forced to fuel switch, the cost of maintaining a safe and resilient natural gas system will have to be funded by fewer customers.

In 2018, AGA engaged a cross-functional team of experts to evaluate policy-driven electrification of the U.S. residential sector. While not directly addressing buildings, the study, "Implications of Policy-Driven Residential Electrification," identified numerous challenges to policies, such as those proposed by the Department, including:

- Cost-effectiveness
- Consumer impacts
- Transmission capacity constraints on the existing electrical system
- Current and projected electric grid emissions levels
- Requirements for new investments in the power grid to meet new growth in peak generation demand during winter periods.

The study finds that a policy targeting widespread electrification of the U.S. residential sector would result in only a small fraction of greenhouse gas emissions reductions; could be financially burdensome to consumers; could have profound impacts and costs on the electric sector; and could be a very costly approach to emissions reductions. Specifically, the study notes that the U.S. Energy Information Administration projects that by 2035 direct residential natural gas use will account for less than 4 percent of total greenhouse gas emissions, and the sum of natural gas, propane, and fuel oil used in the residential sector would account for less than 6 percent of total greenhouse gas emissions. The study

-

<sup>&</sup>lt;sup>3</sup> "Implications of Policy-Driven Residential Electrification," (July 2018), available at https://www.aga.org/researchpolicy/resource-library/implications-of-policy-driven-electrification/ (last visited January 18, 2024).

concludes that reductions from policy-driven residential electrification would reduce greenhouse gas emissions by 1 to 1.5 percent of U.S. greenhouse gas emissions in 2035. The potential reduction in emissions from the residential sector would be partially offset by an increase in emissions from the power generation sector, even in a case where all incremental generating capacity is renewable. Furthermore, the study found that policy-driven electrification would increase the average residential household energy-related costs (amortized appliance and electric system upgrade costs and utility bill payments) of affected households by \$750 to \$910 per year, or about 38 percent to 46 percent.<sup>4</sup>

The impacts of fuel switching on the reliability and resilience of the energy system must be fully examined. The Department should consider in a comprehensive and systematic manner the challenges and unknown factors of comprehensive building sector electrification as it pertains to the proposal.

AGA's Net-Zero Study discussed the challenges and unknown factors related to building sector electrification. AGA's Net-Zero Study at 42-44. While careful analysis is required to understand the full extent of any challenges in a specific region, electrifying buildings can spur additional infrastructure costs if it is necessary to increase available generating capacity and upgrade the electricity grid to meet a new peak in electricity demand. Adding significant levels of electric space heating often shifts the electric grid from summer peaking to winter peaking. Many local power distribution grids would require significant upgrades to handle the additional load from comprehensive building electrification. In addition to implications on the electric system infrastructure, electrification of residential and commercial buildings can have potentially costly ramifications or technical limitations that will impact current gas customers. For example, retrofitting commercial buildings in major urban centers can be extremely difficult.

\_

<sup>&</sup>lt;sup>4</sup> The study did not assess the incremental costs required to expand the electric distribution system.

Some additional factors that will affect the impact of building electrification include:

- The region's existing generation capacity and outlook for new generating capacity coming online.
- The region's adoption rate of EVs, how much that will shift energy demand from gasoline to electricity, and whether there are policies and incentives in place to shift EV charging out of peak demand periods.
- The efficiency of the building stock in a region. The cost of all forms of energy is expected to go up in pursuit of carbon-neutral targets. Energy efficiency is often the least expensive strategy and, therefore, should be the first action taken in many cases. Before pursuing building electrification, the Department should prioritize and incentivize energy efficiency upgrades, such as building envelope upgrades.
- Natural gas distribution systems design. Natural gas distribution systems are designed to provide service reliably with a plan to serve firm customers without disruption during peak winter periods, often called a "design day." Winter load fluctuations (the difference between peak design day and an average winter day) tend to be much higher than fluctuations in summer loads, creating additional challenges associated with reliability. It is critical to understand the expected performance of end-use equipment on peak cold days when air source heat pumps may rely on electric resistance back-up and to understand electric system requirements to meet design day peak demand for electrified end uses.
- Decommissioning costs. Most decarbonization studies have not addressed the cost of decommissioning the gas system if all customers were to electrify fully.

The challenges and opportunities for electrification will also depend on the scale, speed, and sectors being electrified. Not all forms of electrification will have the same costs or impacts, and some gas uses, like space heating will pose a particular challenge to electrify.

# The Gas System is Reliable and Resilient; However, the Department Does Not Consider These Characteristics as Part of the Proposal.

The resilience characteristics of the U.S. gas system allow it to contribute to the overall resilience of the U.S. energy system, and such attributes should be recognized. The Department should not lose sight of the fact that the gas system is currently providing substantial reliability and resilience benefits to the entire U.S. energy system. The fuel switching contemplated by the proposal could undermine a system that provides energy directly to customers and indirectly as a fuel source for generating electricity. The strength of the current system resilience is a byproduct of a regulatory environment that has valued investment in a reliable, reliable, and safe set of assets designed around a legacy demand forecast and historical heating degree day planning. A resilient energy system is essential to the operation of nearly every critical function and sector of the U.S. economy as well as the communities that depend upon its services. Disruptions to the U.S. energy system create widespread economic and social impacts, including losses in productivity, health and safety issues, and—in the most extreme cases—loss of life.

The American Gas Foundation issued a report in January 2021 "Building a Resilient Energy Future: How the Gas System Contributes to U.S. Energy System Resilience," ("AGF Resilience Report")<sup>5</sup> which provides a framework for regulators, policymakers, and other stakeholders to examine energy system resilience and the role of the natural gas system. The AGF Resilience Report highlights the gas system's ability to support resilience through its inherent, physical, and operational capabilities that enable it to meet the volatile demand profiles resulting from resilience events. AGF Resilience Report at 13-24. The AGF Resilience Report found that the gas system supports a quick response to events and provides long-duration storage resources to meet peak and seasonal energy demand. *Id.* at 3-4 and 36. Large, catastrophic failures of the energy system have been few and far between, but they do occur, and the gas system has performed well, overcoming periods of high stress that have threatened its

\_

<sup>&</sup>lt;sup>5</sup> American Gas Foundation, "Building a Resilient Energy Future: How the Gas System Contributes to U.S. Energy System Resilience," (January 2021) available at <a href="https://gasfoundation.org/2021/01/13/building-a-resilient-energyfuture/">https://gasfoundation.org/2021/01/13/building-a-resilient-energyfuture/</a> (last visited January 18, 2024) ("AGF Resilience Report").

resilience. *Id.* at 3. These high stress events are becoming more frequent due to the increase in the frequency and severity of extreme weather events associated with climate change. *Id.* at 11.

To successfully build for the future and invest in the right set of resilience solutions, it is important for stakeholders to understand how the energy system has performed under recent resilience events. To that end, the AGF Resilience Report analyzed the U.S. energy system's potential vulnerabilities and resilience attributes.<sup>6</sup> In short, the multitude and diversity of resilience assets that already exist as part of the energy system have made the difference—facilitating energy flows to customers and critical services. AGF Resilience Report at 24-45. Driven by changes in cost and availability of new technologies and the increasing political and social pressure to decarbonize our nation's energy system is transforming. This transformation has brought to light an issue of energy system resilience related to the growing interdependency of the gas and electric systems. AGA is concerned that requiring fuel switching as a preferred path forward for the energy system ignores the benefits provided by the gas system and could undermine the resilience of the energy system.

As the Department considers fuel switching, in this context and others, it should fully consider resilience and reliability. Part of that process should include defining energy system resilience in a measurable and observable manner that includes a set of metrics, similar to how reliability is considered. Resilience solutions must be considered from a fuel-neutral perspective and across utility jurisdictions, requiring electric, gas, and dual-fuel utilities to work together to determine optimal solutions. Furthermore, methodologies need to be built for valuing resilience, such that it can be integrated into a standard cost-benefit analysis. The value must consider the avoided direct and indirect costs to the service provider, customer, and society.

\_

<sup>&</sup>lt;sup>6</sup> AGF Resilience Report at 24-45. The report exams Polar Vortex (January 2019), Polar Vortex (February 2014), Hurricane Isaias (August 2020) and Heat, Drought, and Wildfires (August 2020).

# The Department's Proposal Should Fully Embrace the Use of Renewable Gases and Hydrogen

The Department should revise the proposal to ensure that it does not hinder the current and future use of renewable gases and hydrogen in buildings. The Department should ensure the greatest amount of flexibility possible for achieving emission reductions. AGA strongly supports expanding access to renewable gases in an effort to accelerate widespread accessibility and adoption of renewable and low-carbon energy sources. The natural gas system can store and deliver renewable energy derived from various sources and be a critical tool for reaching GHG reduction goals.

In July 2025 the American Gas Foundation released a comprehensive new report<sup>7</sup> detailing the availability, cost and emissions reduction potential of U.S. renewable natural gas (RNG) resources. The analysis, developed in partnership with ICF, provides national and state-by-state results, demonstrating an abundant and scalable fuel source that can provide consumers with more cost-effective solutions to lowering emissions. The 2025 Renewable Natural Gas Supply Assessment found the biomass supply available to produce RNG has increased 17% since the original 2019 assessment, providing a significant resource potential for RNG production now and potentially increasing into 2050 across the United States. This resource potential is enough to meet the energy needs of all U.S. residential households currently using natural gas for end use, with the potential to cut greenhouse gas emissions by more than 300 million metric tons every year. These statistics underscore the significant role RNG can play as a storable, dispatchable renewable energy resource. Delaware is already experiencing the benefits of RNG production from existing waste streams across the agricultural sector in crucial industries like poultry farming.

Due to the environmental benefits of renewable gases, the Department should ensure that such gases are fully leveraged to achieve decarbonization goals for buildings. Moreover, using RNG and hydrogen in the existing gas distribution system could mitigate the need to site, permit, and build out the additional electric infrastructure that would be required because of this proposal. RNG use can also

<sup>&</sup>lt;sup>7</sup> American Gas Foundation, *Renewable Natural Gas Supply Assessment*, (July 2025), <a href="https://gasfoundation.org/2025/07/10/renewable-natural-gas-supply-assessment">https://gasfoundation.org/2025/07/10/renewable-natural-gas-supply-assessment</a> agf-report-july2025/.

increase the resilience of the energy system by providing a locally sourced supply of clean energy. As the Department is aware, permitting, approving, and building energy infrastructure projects is not a simple task. The Department should seek ways to utilize existing natural gas infrastructure and not assume that the siting and permitting of an expanded electric transmission grid, needed to replace the gas system, would be any easier than the current approval process for natural gas facilities. An efficient alternative is to maximize existing pipeline infrastructure and permit the expansion of RNG and hydrogen over time to achieve carbon emissions reduction goals.

As part of its analysis, the Departments should contemplate future scenarios where the gas system incorporates lower carbon fuels, such as RNG and hydrogen.

#### Conclusion

The American Gas Association respectfully requests that the Department consider these comments in this proceeding and not implement the proposed "Regulations for State Energy Conservation Code" proposed for the reasons stated herein. If you have any questions regarding this submission, please do not hesitate to contact the undersigned.

Dated: August 6, 2025, at Washington, District of Columbia.

Respectfully submitted,

Michael Murray

General Counsel

American Gas Association