



AMERICAN PUBLIC GAS ASSOCIATION

September 20th, 2019

The Honorable Bobby Rush
Chairman, House Energy and Commerce Committee Subcommittee on Energy
2188 Rayburn House Office Building
Washington, DC 20515

The Honorable Fred Upton
Ranking Member, House Energy and Commerce Committee Subcommittee on Energy
2183 Rayburn House Office Building
Washington, DC 20515

Re: Energy and Commerce Committee Subcommittee on Energy Hearing on “Building a 100 Percent Clean Economy: Solutions for the U.S Building Sector”

Dear Chairman Rush and Ranking Member Upton,

APGA represents roughly 1,000 retail natural gas distribution entities owned by, and accountable to, the citizens they serve. They include municipal gas distribution systems, public utility districts, county districts, and other public agencies that own and operate natural gas distribution facilities in their communities. Public gas systems’ primary focus is on providing safe, reliable, and affordable natural gas service to their customers. APGA members serve their communities in many ways. They deliver natural gas to be used for cooking, clothes drying, and space and water heating, as well as for various commercial and industrial applications. We appreciate the opportunity to submit input on this important hearing to examine solutions for building energy efficiency.

APGA Believes in an Energy Efficient Building Sector

At the most basic level, APGA represents the views of American consumers and wants to help public natural gas utilities meet their needs in an environmental and energy efficient way, through supplying sustainable and affordable natural gas to heat homes and water, cook meals, and dry clothes, as well as power restaurants, schools and hospitals, and service businesses of all

types. As the debate on our energy future continues, it is clear that energy efficiency will be one of the foundations on which we build.

It is critical that energy efficiency measures be based on sound science, transparent data, and achieve substantial energy savings for the cost incurred. APGA members support comprehensive policies achieving this goal, since they desire to be good stewards of the environment. However, any policy must not jeopardize the affordability and reliability of the nation's energy matrix. By forcing a fuel-switch to a single end-use technology (electricity) rather than focusing on a pathway to emissions reductions, energy affordability and grid reliability is threatened. Low-cost natural gas, environmentally-responsible renewable natural gas, and the existing infrastructure can play a significant role in reducing emissions from our nation's buildings, both residential and commercial.

APGA's members are also investing in innovation, knowing it is key for energy efficiency progress. While there are more customers using natural gas, the overall throughput is declining.¹ Better insulation, tighter-fitting windows and doors, and even programs championed by APGA's members are allowing for more efficient buildings. In addition to these, APGA supports investments and research into renewable natural gas technology and energy storage through electrolysis, advances that truly achieve a clean and balanced energy future. Public gas utilities have a proactive focus on innovation that helps Americans achieve utility bill savings and lessen environmental impacts.

Natural gas should be a part of any U.S. effort to meet emission reduction objectives given the highly efficient nature of direct use technologies. APGA urges the Subcommittee to fully consider the benefits of natural gas direct use and maintain energy end-use diversity, as it considers policies intended to address the delivery of energy in a manner that minimizes environmental impacts.

Natural Gas Use in Residential Buildings

APGA supports balanced energy solutions that achieve environmental benefit. Residential natural gas appliances are highly efficient and can achieve emissions reductions and consumer savings. On a source-energy basis, natural gas appliances are 92% efficient. That is, 92% of the energy produced and delivered is consumed by the appliance at the point of use.

¹ AGA, "Natural Gas Safety, Resilience, Innovation, 2019 Playbook," <http://playbook.aga.org/#p=14>.

Comparatively, electric appliances are only 37% efficient.² Requiring consumers to eliminate natural gas as an option forces consumer to choose potentially less efficient and more costly appliances.

Residential natural gas consumption only accounts for 4% of total US GHG emissions.³ However, the gas distribution industry continues to innovate to cut emissions across the sector. For example, APGA's Research Foundation is focused on developing a low-cost, efficient, natural gas-fired heat pump, coordinating with the Gas Technology Institute (GTI) in this effort.⁴ Another valuable technology is the use of micro-combined heat and power (CHP) system.⁵ These generate on-site electricity from natural gas and recycle waste heat for building operations, resulting in a highly-efficient system. CHP is often used in hospitals, universities, and other larger applications, but increased deployment opportunities in the residential sector exist and should be explored. The Subcommittee can guide the Department of Energy (DOE) in investing in natural gas appliance technologies to improve efficiency, allowing for decreased GHG emissions. APGA is fully committed to ensuring the residential building sector continues to innovate ways to increase energy efficiency and firmly believes that natural gas is a key, not an obstacle in this mission.

Americans also want natural gas in their homes. Take California, for example. Recent data shows less than 10% of voters would choose an all-electric home, and 80% oppose prohibiting the use of gas appliances.⁶ Forcing fuel switching would also be burdensome. A survey of California families shows electrification will cost \$7,200 to retrofit a home and \$388/year more in energy bills.⁷ A national study shows families would have to spend, on average \$4,847, to replace four common household appliances: range, dryer, water heater, and furnace.⁸ APGA encourages considering balance with costs and environmental benefits when

² AGA, "Natural Gas Safety, Resilience, Innovation, 2019 Playbook," <http://playbook.aga.org/#p=50>.

³ AGA, "Natural Gas Safety, Resilience, Innovation, 2019 Playbook," <http://playbook.aga.org/#p=44>.

⁴ GTI, "Enhancing Efficiency in Space Conditioning and Water Heating," <https://www.gti.energy/enhancing-efficiency-in-space-conditioning-and-water-heating/>.

⁵ GTI, "Improving Technology, Proving Feasibility, and Reducing Costs of Micro-CHP," <https://www.gti.energy/improving-technology-proving-feasibility-and-reducing-costs-of-micro-chp/>.

⁶ California Building Industries Association, California Natural Gas Poll - Consumer Survey of 3000 California Voters

⁷ Navigant Consulting, "The Cost of Residential Appliance Electrification: Phase 1 Report – Existing Single-Family Homes"

⁸ Consumer Energy Alliance, "Green New Deal Would Cost American Consumers Almost \$244 Billion in Just Four Appliances.," <https://consumerenergyalliance.org/2019/02/green-new-deal-would-cost-american-consumers-244-billion-four-appliances/>

evaluating energy policies, realizing energy efficiency gains do not need to come at undue consumer expense.⁹

The Role of Natural Gas in Commercial Buildings

As the world's largest real estate holder, the federal government can be a leader in building efficiency by deploying highly-efficient natural gas technologies across their portfolio. However, Section 433 of the Energy Independence and Security Act of 2007 (EISA 2007) mandates elimination of all fossil fuel-generated energy use in federal buildings by the year 2030. The mandate covers new buildings and major renovations (defined as at least \$2,500,000 in 2007 dollars), limiting and ultimately eliminating the role of natural gas in federal facilities. Section 433 creates a bias in federal policy, opposing the important role that domestically abundant, clean, and affordable natural gas can serve, meeting the energy needs of not only federal buildings but the country as a whole. Specifically, the mandate seeks to reduce fossil fuel use by 65% by 2020 with total elimination by 2030 and will prohibit both the ultra-efficient direct use of natural gas in federal buildings and the use of gas-fired generation, which is the preference today by most utilities in the nation to minimize the effects of GHGs. For example, Section 433 would restrict the adoption of the previously discussed, highly-efficient CHP systems. By restoring the ability of federal installations to utilize natural gas, energy managers will be able to use any energy efficient, cost-effective end-use applications of natural gas in the long-term.

It should be noted that federal buildings, many of which receive natural gas from APGA members, must have a resilient and reliable energy supply. Natural gas has a track record of consistent service. During both Hurricane Harvey in 2017 and the 2018 Bomb Cyclone, or "snow hurricane," natural gas service was maintained.¹⁰ Doesn't the federal government deserve this reliability?

Given this evidence, APGA asks that the Subcommittee consider H.R. 2664, the "All-of-the-Above Federal Building Energy Conservation Act of 2019" and pass this legislation. It makes the appropriate updates to allow for efficient energy use in federal buildings.

⁹ Martin, Emmie, CNBC, "Only 39% of Americans Have Enough Savings to Cover a \$1,000 Emergency," <https://www.cnbc.com/2018/01/18/few-americans-have-enough-savings-to-cover-a-1000-emergency.html>

¹⁰ Natural Gas Council, "Natural Gas Reliable and Resilient Report," <http://naturalgascouncil.org/natural-gas-reliable-and-resilient/>

Other efficiency gains can be made in commercial applications. The APGA Research Foundation, through its partnership with GTI, has focused on high-efficiency natural gas commercial equipment and foodservice appliances.¹¹ This work involves a variety of commercial kitchen equipment, such as fryers and ranges. Chefs prefer natural gas, since it is quick, controllable, and affordable. Natural gas needs to remain a fuel for restaurants around our nation.

Conclusion

APGA appreciates the opportunity to submit testimony before the Subcommittee on this critical public interest issue. We hope the balance of environmental impact and consumer choice and affordability will be considered, while any policy is developed. Natural gas direct use in residential and commercial buildings is critical to achieving our country's environmental objectives, and its use will not jeopardize reliability, affordability, and resiliency of the energy systems serving all Americans. We stand ready to work with the Committee and Subcommittee on this and other issues.

¹¹ GTI, "Creating a Suite of High-Efficiency Natural Gas Commercial Equipment and Foodservice Appliances," <https://www.gti.energy/creating-a-suite-of-high-efficiency-natural-gas-commercial-equipment-and-foodservice-appliances/>