



AMERICAN PUBLIC GAS ASSOCIATION

February 24th, 2021

Congressman Bobby Rush
Chairman, Subcommittee on Energy of the Committee on Energy and Commerce
2188 Rayburn House Office Building
Washington, DC 20515

Congressman Fred Upton
Ranking Member, Subcommittee on Energy of the Committee on Energy and Commerce
2183 Rayburn House Office Building
Washington, DC 20515

Re: February 18, 2021 Hearing on “A Smarter Investment: Pathways to A Clean Energy Future”

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 infrastructure in their communities. Their primary focus is on providing safe, reliable, affordable, efficient, and clean natural gas service to their customers and communities. APGA members deliver natural gas to be used for residential space and water heating, cooking, and clothes drying, as well as for various commercial and industrial applications.

In the Energy Subcommittee’s February 18th hearing titled, “A Smarter Investment: Pathways to A Clean Energy Future,” members heard testimony addressing the environmental challenges that our country faces. Most of this discussion concerned power generation and electricity, specifically in the context of the recent report from the National Academy of Sciences (NAS), titled, “Accelerating Decarbonization of the U.S. Energy System.” However, APGA would like to bring to the attention of the Energy Subcommittee an essential element of any pathway to a clean energy future is utilization of the extensive network of existing natural gas infrastructure, which affords American consumers the opportunity to directly use natural gas in their homes and businesses now and preserves this critical asset for low and zero carbon fuels in the future. Solutions need to be determined to prevent future blackouts, like the ones that occurred in California in 2020 and Texas just this month. People in those states will attest, though, that having access to more than one energy source for your home or business is critical to maintaining a reliable and affordable energy system.

Two statements were made during the hearing that need to be highlighted. First from Subcommittee Chairman Bobby Rush:

Members of the subcommittee, I humbly submit to you that getting the U.S. back in the lead on clean energy is essential for all of us. There are severe consequences to our inaction. Inaction is not an option.

Also, from Congressman Burgess, who was serving as the acting Ranking Member of the Subcommittee:

We all agree that America deserves a cleaner future, but pursuing a path towards that future while ignoring energy reliability is the wrong approach.

APGA could not agree more with these sentiments. Natural gas and the infrastructure and workforce that ensure it gets to America's homes and businesses are essential in the US furthering clean energy policy, all while ensuring Americans have reliable and affordable energy sources. The information below highlights: 1) Natural gas infrastructure is critical in achieving America's decarbonization goals and 2) Natural gas infrastructure is key to ensuring all Americans have access to affordable, clean energy. APGA suggests that the Subcommittee consider this input, as it develops clean energy legislation, recognizing complete electrification of our nation's energy system is bad policy.

1. Natural gas infrastructure is critical in achieving America's decarbonization goals.

The NAS report provides that a Technological Goal be "Electrify energy services in transportation, buildings, and industry." Specifically, the report calls for, "increase the share of electric heat pumps for heating and hot water to 25 percent of residential and 15 percent of commercial buildings, replacing fossil furnaces and boilers; initiate policies for new construction to be all electric in all practical climate zones."¹ As the US works on alternative pathways to transition to a lower carbon energy system, policies that limit or eliminate consumer access to the natural gas infrastructure network should not be considered. If these are pursued and implemented, the environmental benefits achieved through the direct use of natural gas in home appliances versus electricity generation are lost, resulting in more greenhouse gas (GHG) emissions. Directly using natural gas, rather than electricity, in appliances, such as stoves, clothes dryers, water heaters, and furnaces is three times more efficient on a full-fuel-cycle basis. Specifically, about 90% of the energy produced is delivered and directly consumed by the natural gas appliance at the point of use. Electricity delivered to consumers, on the other hand, is only about 1/3 efficient due to energy lost during conversion and transmission.² This direct use translates to lower emissions. Recent data shows that only about 4% of total US GHG emissions come from residential natural gas use, and through appliance efficiencies, these emissions have been getting smaller over time. The residential customer averages about a 1.2 percent decline per year in carbon emissions, despite consistent growth in the size of homes. Also, the pipeline network is getting cleaner, as emissions from the US natural gas distribution system have declined 73% since 1990, while more natural gas customers continue to be added to the system every year.³

Natural gas utilities, including APGA members are committed to do more to reduce environmental impact. They are finding new and innovative ways, such as investing in renewable natural gas (RNG), allowing capture and repurpose of emissions that would otherwise impact the environment. RNG is pipeline-compatible, ultra-clean, and in most cases, carbon negative or carbon neutral. It is derived from the breakdown of organic wastes and can be processed to be used in existing natural gas infrastructure interchangeably with geologic natural gas to serve homes and businesses. Hydrogen has

¹ National Academy of Sciences, "Accelerating Decarbonization of the U.S. Energy System (2021)," <https://www.nap.edu/catalog/25932/accelerating-decarbonization-of-the-us-energy-system>

² American Gas Association, "A Comparison of Energy Use, Operating Costs, and Carbon Dioxide Emissions of Home Appliances – 2018 Update," <https://www.aga.org/globalassets/research--insights/reports/ea-2018-02-appliance-cost-and-emissions-comparison-2018-update.pdf>

³ American Gas Association, "2021 Playbook: Picture the Potential" <http://playbook.aga.org/>

the capability to be blended with natural gas or possibly used exclusively; both have decreased emissions. In the future, blended hydrogen or hydrogen exclusively may be safely utilized in homes, businesses, and commercial applications. RNG and hydrogen can provide balanced energy solutions, helping Americans lessen environmental impacts. By preserving and enhancing the natural gas infrastructure of today and not implementing the policies in the NAS report by mandating all-electric appliances, public natural gas utilities can be a critical partner in delivering the low carbon fuels of tomorrow, ensuring sustainable energy for all Americans for many years to come.

2. Natural gas infrastructure is key to ensuring all Americans have access to reliable and affordable energy.

Energy supplied by America's community-owned gas utilities plays a critical role in ensuring energy resiliency in the communities they serve. A recent report by the Natural Gas Council reveals:

The operational characteristics of the natural gas transportation network, in combination with the physical properties of natural gas, effectively minimize the likelihood and severity of service disruptions. In the rare event of a disruption, impacts are typically localized and brief. History demonstrates that disruption of firm pipeline transportation and/or storage services resulting from severe weather events are extremely rare.⁴

While there is still investigation needed into the events that occurred in California in 2020 and Texas the week of February 15th, mostly, the pipeline infrastructure remained operational in delivering natural gas to homes and businesses. Any impacts were due to upstream supply challenges caused by the extreme weather. After winter storm Uri, American families recognize now, more than ever, that energy availability is not negotiable, and the direct use of natural gas is a key component in ensuring homes and businesses receive the energy they need.

The Energy Subcommittee should look to the extensive natural gas infrastructure as a key American resource in decreasing energy burden. Not counting the unprecedented events of the week of February 15th, which were beyond the control of APGA members, consumers pay relatively low prices for the direct use of natural gas for their home or water heating, cooking, and clothes drying needs. In the Department of Energy's (DOE's) "2020 Representative Average Unit Costs of Energy," electricity is \$38.28 per million Btu, and natural gas is \$10.13 per million Btu.⁵ Further, a recent study shows households with all-electric appliances pay almost \$900 a year more than those that have the traditional mix of natural gas and electric appliances.⁶ The American Council for an Energy Efficient Economy (ACEEE) highlighted in a report that low-income, Black, Hispanic, and Native American households are the demographics most impacted with higher energy burdens.⁷ Why take affordable natural gas away? Americans should not be required to have electricity as their only energy choice, when natural gas continues to be the best value.

⁴ Natural Gas Council, "Natural Gas: Reliable and Resilient." <http://naturalgascouncil.org/wp-content/uploads/2019/04/Natural-Gas-Reliable-and-Resilient.pdf>

⁵ Department of Energy, "Energy Conservation Program for Consumer Products: Representative Average Unit Costs of Energy," <https://www.federalregister.gov/documents/2020/08/14/2020-17803/energy-conservation-program-for-consumer-products-representative-average-unit-costs-of-energy>

⁶ American Gas Association, Implications of Policy-Driven Residential Electrification, <https://www.aga.org/research/reports/implications-of-policy-driven-residential-electrification/>

⁷ American Council for Energy-Efficient Economy, "How High Are Household Energy Burdens? An Assessment of National and Metropolitan Energy Burdens across the U.S."

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APGA's members agree with the members of the Energy Subcommittee, especially Chairman Rush and the acting Ranking Member Burgess, that action is needed, and Americans require both clean and reliable energy. Equitable energy policy can be achieved with a balanced solution, benefitting both the environment and consumers, especially those facing increasing energy burdens. Do not take the recommendations from the NAS report and force American homeowners and businesses to be all-electric. This drastic approach misses the mark because consumers unnecessarily would pay higher utility bills, while discarding the value natural gas infrastructure has delivered through decreased emissions now and will continue to deliver well into the future through innovations around increased use of RNG and hydrogen. APGA hopes the Subcommittee will develop policy with environmental benefits balanced with reliability and affordability for all Americans. Thank you again for the opportunity to submit this written testimony. APGA stands ready to work together in this effort.



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