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APGA is the trade association for approximately 1,000 communities across the U.S. that own and operate their retail natural gas distribution entities. They include municipal gas distribution systems, public utility districts, county districts, and other public agencies, all locally accountable to the citizens they serve. Public gas systems focus on providing safe, reliable, and affordable energy to their customers and support their communities by delivering fuel to be used for cooking, clothes drying, and space and water heating, as well as for various commercial and industrial applications. Our members also supply gas to natural gas vehicle (NGV) fueling stations, and many also maintain and manage fueling stations or operations of their own.

APGA has been a strong supporter of the growth and development of the NGV industry, which is why we are eager to contribute to the Subcommittee’s discussion of the important topic of decarbonization of the transportation sector. NGVs are already some of the cleanest vehicles on the road with significantly lower greenhouse gas (GHG) emissions than those using gasoline or diesel engines. Despite this, the ongoing conversation regarding transportation and climate change centers on electrification. We appreciate the opportunity to share more information with the Subcommittee about NGVs’ potential to help accomplish the Administration’s ambitious climate goals.

The Subcommittee is right to draw attention to the importance of low and no-emission vehicles in America’s pursuit of a clean energy future. Electric vehicles, however, are not the only available technology. The Department of Energy estimates that natural gas engines can lower emission levels of
GHGs as much as 11 percent when compared to traditional gasoline combustion engines. While NGVs are already cleaner and achieve lower GHG emission levels than traditional vehicles, they also have the immediate potential to become even more environmentally friendly with additional support for the development of renewable natural gas (RNG). RNG, which is produced by capturing gas created by various waste sources, is chemically identical to fossil natural gas and can be blended with fossil natural gas or, in some cases, used exclusively in a system. Blending even small amounts of RNG with fossil natural gas can produce significant emissions reductions, and RNG currently accounts for more than 53 percent of all natural gas motor fuel. Because RNG is created by recycling biomethane collected from agricultural waste, landfills, and wastewater treatment plants into a usable product, it has the potential to yield a carbon-negative lifecycle emissions result. Continuing to promote and invest in the development and use of this fuel will only further advance the already existing environmental benefits of NGVs.

The environmental benefits of RNG have led to growing interest from the transportation sector in increasing the use of RNG to lower GHG emissions. The United Parcel Service (UPS), for example, is making significant investments in RNG and compressed natural gas (CNG) transportation initiatives. They recently announced plans to purchase more than 6,000 natural gas-powered trucks between 2020 and 2022, a commitment representing a $450 million investment in the company’s alternative fuel program to reduce emissions. Amazon, as part of its commitment to become carbon neutral by 2040, also recently signed a five-year contract to purchase RNG for its fleet.

It is especially noteworthy that, when fueled by RNG, the newest NGVs are the only fully commercially available option to achieve ultra-low or near-zero emission levels of nitrogen oxides (NOx). They also produce a much lower amount of particulate matter than other engines, supporting the Administration’s goals of decreasing emissions in areas disproportionately impacted by urban air pollution. Cummins Westport, for example, already produces natural gas engines that are 90% cleaner than what the current EPA standard requires. The company’s 8.9-liter ISL G NZ engine is certified to meet the California Air Resource Board (CARB) standard – the most rigorous emission standard for NOx. This already-existing natural gas engine technology can fill an important gap by providing an opportunity to reduce emissions in difficult to electrify applications like long-haul and regional trucking, transit buses, refuse trucks, and high horsepower off-road equipment. Heavy-duty vehicles and equipment are

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2 Id.
3 Id.
4 “Decarbonize Transportation with Renewable Natural Gas,” NGV America, [https://static1.squarespace.com/static/53a09c47e4b050b5ad5bf4f5/t/6079e813a7999069b32ece17/1618602009958/NGV+RNG+Decarbonize+2020+final.pdf](https://static1.squarespace.com/static/53a09c47e4b050b5ad5bf4f5/t/6079e813a7999069b32ece17/1618602009958/NGV+RNG+Decarbonize+2020+final.pdf), accessed May 4, 2021.
5 Id.
8 NGV America, *supra* note 4.
major sources of emissions, and while reliable electric alternatives are not yet available, natural gas options are. Replacing one diesel-burning, heavy-duty truck with a new ultra low-NOx, natural gas heavy-duty truck has the same emissions reduction impact as removing 119 traditional combustion engine passenger vehicles from the road.\footnote{Which Road to Take,” NGV America, \url{https://ngvamerica.org/wp-content/uploads/2020/10/NGVAmerica-Which-Road-TX-vs-CA-Investments.pdf}, accessed May 4, 2021.} If policymakers are serious about achieving the ambitious emissions reduction goals laid out by the Administration, it would be foolish to ignore the opportunity to capitalize on existing natural gas technology to reduce emissions in these areas, simply because it does not fit with the current narrative of electrification as the “end all be all” climate solution.

Finally, APGA would like to urge the Committee to consider the full lifecycle of vehicles and their energy source when considering the path forward. While we acknowledge that battery powered electric vehicles (BEVs) have the advantage of zero-tailpipe emissions, producing lithium-ion batteries is an energy intensive process. In fact, manufacturing an electric vehicle can produce anywhere from 15 to 68 percent more GHG emissions than a conventional vehicle, depending on the size and range.\footnote{Cleaner Cars from Cradle to Grave, Union of Concerned Scientists, \url{https://www.ucsusa.org/resources/cleaner-cars-cradle-grave}, accessed May 4, 2021.} This should be taken into account when evaluating the environmental benefits of BEVs versus other alternatives, like NGVs. It is also important to note that battery disposal is another looming environmental issue associated with BEVs. The current lack of available recycling methods when electric vehicle batteries reach the end of their useful life is an additional environmental cost that should be factored into the Committee’s consideration of how to move towards a cleaner transportation future.

APGA supports the Committee’s work to reduce emissions and move towards a cleaner transportation sector, and we are grateful for the opportunity to contribute to the conversation on this important topic. However, the Committee should promote a level playing field for all clean vehicle fuels. The pursuit of electrification as the sole solution ignores the contributions natural gas has already made to lowering emissions and abandons its potential in achieving environmental goals. If policymakers provide support for the adoption of NGV technology and the increased use of RNG, public natural gas utilities will continue to deliver emissions reductions and environmental benefits well into the future. For these reasons, APGA hopes the Committee will pursue an “all of the above” approach to reducing emissions in the transportation sector. Thank you again for the opportunity to submit this input. APGA stands ready to work together in this effort.

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