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Senate Committee on Energy and Natural Resources
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Good Morning, Chairman Bingaman, Ranking Member Murkowski, and Members of the Committee. I am Mike Gallagher, Senior Adviser to and Former President and Chief Operating Officer of Westport Innovations, a leading natural gas engine company. I am also Chairman of the Board of Agility Fuel Systems, and am just finishing a two year project as Chairman of the Natural Gas Group of the National Petroleum Council's Study on Future Transportation Fuels, which will be released next week here in Washington.

In this study, which I believe is the most comprehensive analysis ever performed of America's transportation technology and options, we have assessed every technology involved in natural gas transportation – from engine combustion science to on board storage to cryogenics to infrastructure to the vehicles themselves. We identified every conceivable barrier to the commercialization and expansion of natural gas transportation, assessed the significance of those barriers, and identified their resolution. We looked at the expansion potential, in heavy and light duty markets, the costs and economic attractiveness, the investment requirements, and the environmental emissions. We can put all this information in the Committee Record on August 2.

Today, more than 95% of all vehicles – cars, pickup trucks, buses, big rigs, trains, planes and ships – run on oil, either conventional petroleum or biofuel blends.

But I am here to tell you that there is GOOD NEWS COMING on ENERGY and TRANSPORTATION. And a lot of that good news is being driven by what's going on today in the world of Natural Gas Vehicles. Technology and innovation is exploding in natural gas transportation, with hardly a week passing without another new announcement from a major industry participant.

My company Westport Innovations is best known as being successful at developing the technology and commercializing the engines and vehicles for heavy duty buses and trucks. We made these large strategic investments in heavy duty engine technology and market development because we felt the trucking industry was motivated almost entirely by economics and the cost of moving freight, where the lower cost of natural gas would drive market decisions. And we believed that the infrastructure challenges could be managed more easily, by evolving from central fueling stations, return to base fleets, and transportation corridor refueling. So we developed partnerships with some of the world's preeminent heavy duty engine manufacturers, including Cummins in Indiana, and Volvo in Europe and Weichai in China.

I want to acknowledge the tremendous leadership we are seeing from the OEMs- the engine, automotive and truck manufacturers. Ten years ago Cummins took the bold step of partnering with Westport in a 50:50 Joint Venture, which has since sold thousands of bus and truck natural gas engines. It may surprise you to hear that we are now exporting natural gas engines from a factory in North Carolina to bus manufacturers in China.

Kenworth and Peterbilt also jumped in four years ago to put the first big natural gas trucks on the road, at the Ports of LA and Long Beach. And just a couple of weeks ago we opened a new factory in Kentucky dedicated to making Ford F-250 natural gas pickup trucks. All these industrial enterprises- and many others- are working to create an exciting new clean energy industry, a natural gas transportation industry.

All this entrepreneurial activity is also setting the stage for use of new low carbon sources of natural gas, so-called renewable natural gas from landfills, agricultural waste, and forestry resources.

We no longer have to choose which markets to serve with natural gas. Last Fall's earlier NPC study on oil and gas resources concluded that the economically recoverable supply of North American natural gas is enormous, with the potential to meet even the highest levels of demand considered.

Will this transformation of America's transportation system and the creation of a robust natural gas transportation industry be easy? Of course not – but what important achievement in our Nation's history has ever been easy. We do have a strong platform of building blocks to provide confidence that natural gas can play an increasing role in vehicles:

1. We know that we have a long-term and low-cost domestic supply of natural gas, driven by economically recoverable shale gas resources.
2. We also now know there is a big opportunity both for light duty and heavy duty natural gas vehicles, based on this lower cost of natural gas relative to diesel and gasoline fuels.
3. We have also concluded that there are relatively few technological barriers to market entry and expansion for either LD or HD natural gas vehicles.
4. All the great work that is going on in the labs and automotive R&D centers to improve the efficiency and fuel economy of oil-based internal combustion engines is directly applicable to natural gas engines- which use the same spark and diesel combustion engine technologies.
5. Build-out of infrastructure- retail CNG and LNG stations- is critical to support this increased use of natural gas in transportation. This build-out is already occurring for heavy duty fleets, with central stations, return to base and corridor fueling systems leading the way. Just this Spring, the first ever Coast-to-Coast cross country drives were achieved for both a pickup truck and a freight truck using available natural gas public infrastructure.

In summary, I believe we are looking at a vision of our energy and transportation future which is good news for America. Technology and innovation are happening every day throughout the entire natural gas transportation value chain- much of it led by American technology leadership. Each of us can and should encourage this game-changing transformation of our transportation future. Let's all capitalize on today's technology leadership and low cost natural gas resources to build America's natural gas transportation systems for tomorrow.

Thank you very much for this opportunity to speak with you today.