



Canadian Natural Gas Vehicle Alliance

Remarks to the Standing Senate Committee on Energy, the Environment and Natural Resources

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Canadian Natural Gas Vehicle Alliance

Mr. Chair, Honourable Senators, thank you for the opportunity to appear before your committee to outline Canada's Natural Gas Transportation Opportunity.

The Canadian Natural Gas Vehicle Alliance (CNGVA) is the national association representing Canada's natural gas vehicle industry. Our membership includes natural gas distributors, manufacturers of vehicles, vehicle equipment, fueling equipment, research and development innovators, engineering service providers and fleet operators. The CNGVA's mandate is to promote the adoption of natural gas vehicles in Canada. We also support safety through the development of codes standards and training, research and innovation both within member companies and universities, and in partnership with the Government of Canada through industry outreach activities in support of natural gas vehicle adoption.

Transportation employs almost 1 million Canadians and is a \$70 billion per year industry in Canada. It is the second largest source of Greenhouse Gas emissions and other air pollutants. In such a vast country, finding cost effective, low emissions transportation is an enduring challenge, but it is one where natural gas can play a critical role.

Canada's transportation network is vast and interconnected with the United States in over-the-road applications as well as through key seaports. Natural gas is used as a fuel for marine, rail, on road trucking and even in off-road applications such as mining. As an alternative to conventional fuels, natural gas can deliver significant emissions savings, and in particular can reduce greenhouse gases by 10 to 30 per cent depending on the application. As a Canadian natural resource, natural gas reserves are vast and prices are at an all-time low. Developing a broader market for this plentiful Canadian vehicle fuel can make a significant contribution to lowering a variety of harmful emissions, and has the potential to give Canada a significant cost advantage in



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our transportation sector. And as we all know, for an export oriented economy like Canada's low cost transportation is critical to our economic growth and prosperity.

The CNGVA and Canada's natural gas vehicle industry have a strong partnership with the Government of Canada in outreach activities with Natural Resources Canada and with Transport Canada. *The Natural Gas Use in the Canadian Transportation Sector Deployment Roadmap; Liquefied Natural Gas: A Marine Fuel for Canada's West Coast;* and the forthcoming *Liquefied Natural Gas: A Marine Fuel for Canada's Great Lakes and East Coast* were developed in collaboration with the Government of Canada.

More recently, provincial governments in Quebec, British Columbia and Ontario have begun supporting deployment of natural gas vehicles. In British Columbia and Quebec this support has included on road vehicles, as well as marine vessels such as STQ and BC Ferries, as well as off road mining vehicles. To date the government of Ontario has signaled support for on road vehicle adoption. In Budget 2016 the federal government announced the most significant measures in support of adoption in recent years. Natural gas fueling was included as part of a \$62.5 million program to support the development of alternative fueling infrastructure.

As I said this is the most significant financial support from the federal government in recent years. But relative to the challenges facing the industry more can be done. To begin, over the last two years the retail cost of natural gas relative to diesel has approached parity. This has negated the payback for those who invest up-front in natural gas vehicle equipment.

Attaining economies of scale in the refueling and distribution segment of the market requires both more vehicles using natural gas as well as enough refueling points to support a robust network. This is why federal funding is welcome – particularly when added to provincial funding opportunities – and is necessary to get the industry past a key tipping point. Rest assured that the industry's focus is not on the passenger vehicle market. The industry focus remains on a limited number of medium and heavy duty truck fleets, a limited number of domestic marine vessels, possibly heavy rail routes and some remote and off road vehicle applications. But even with this narrow focus, significant infrastructure needs to be developed to ensure retail prices for natural gas are able to match the long term outlook for low natural gas commodity prices.

It is important to recognize that industry players like natural gas distribution utilities cannot easily invest in the development of this infrastructure – particularly as provincial regulators place limits on how these

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investments can occur. Fleet owners do not operate in a high return environment – freight rates are very competitive and function on a high margin basis. As an industry sector they often lack substantial capital investment, often relying on long service of vehicles – for instance 40 or more years for marine and rail vehicles. The timing and opportunity for fuel switching can be a very narrow window.

Up-front capital investment is the industry's challenge. Meeting ambitious short and long term climate change objectives is the Government's challenge. CNGVA in its 2016 Pre-Budget submission encouraged the Government of Canada to consider a one billion dollar strategic investment in the natural gas transportation sector. This investment would have the following components:

- Assistance for on and off-road vehicles to offset the incremental vehicle costs associated with new natural gas engines, conversions and on-board fuel systems (tanks);
- Assistance for incremental costs associated with adding natural gas to a card-lock facility or with internal refueling systems;
- Funding for marine vessel refurbishment and incremental costs for addition of natural gas to new vessel purchase costs;
- Funding for marine and rail refueling facilities – directed at port corporations and rail support facilities; and
- Funding for locomotive refurbishment and incremental costs for additions of natural gas to new locomotive purchase costs.

CNGVA has also requested that the federal government continue to support research development and deployment. In particular, Canada's unique transportation challenges contributed to the development of leading high horsepower engine applications. But Canada's small market has not been enough of a draw to get the next generation of these engines developed and deployed.

Finally, Canada's natural gas distributors have taken a leadership role in proposing targets of 5 and 10 percent Renewable Natural Gas (RNG) content, which will significantly improve the environmental performance of many natural gas applications. This adds to the excellent environmental performance of these applications with regards to GHG reductions. The capture and combustion of renewable natural gas derived from organic waste at landfills, agricultural and food waste sources can actually result in a negative carbon footprint. CNGVA has asked the Government of Canada to assist in identifying and deploying new technologies for RNG production. Support for RNG innovation can help put Canada into the forefront of the global clean tech economy.



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The CNGVA enthusiastically supports your committee's work. Natural Gas Vehicles are a tremendous opportunity for Canada, worthy of your ongoing support.

Thank you.