



Recommendation 1

That the Government of Canada establish an Office of Innovative Regulations in order to ensure the clean technology sector can grow within a regulatory regime that provides certainty, agility and speed based on strong data.

Recommendation 2

That the Government of Canada budget \$50 million to solve regulatory challenges for promising clean technology products. This would be launched as a pilot project, focused on demonstrating the case for the economic and environmental benefits to the Canadian economy.

Recommendation 3

That the Government of Canada will confirm, in Budget 2019, that the Clean Fuel Standard will amplify its economic and environmental benefits by leveraging the opportunity that exists in the natural gas and transportation sectors.

Recommendation 4

That the Government of Canada create a six-year, \$175 million, two-stream fund to drive the advancement of renewable gases in Canada. One stream should support renewable gas technology demonstrations, and the other should support project deployment with the goal of 5 per cent renewable gas content by 2030.

Recommendation 5

That the Government of Canada take steps to strengthen the economy and reduce greenhouse gas emissions by providing up-front funding for fleets to compensate for a portion of incremental capital costs associated with the purchase of natural gas vehicles.

Recommendation 6

That the Government of Canada take steps to strengthen the economy and reduce greenhouse gas emissions by encouraging fleet operators to transition to natural gas through investments in critical refueling infrastructure and by providing funding for site maintenance and safety.

Aug. 2, 2018

Hon. Wayne Easter,
Chair House of Commons Standing Committee on Finance
Sixth Floor, 131 Queen Street House of Commons Ottawa
ON K1A 0A6 Canada

Dear Hon. Wayne Easter,

Thank you for the opportunity to respond to the House of Commons' Finance committee's Pre-Budget Consultations in Advance of the 2019 Budget.

Westport Fuel Systems engineers, manufactures, and supplies advanced clean-burning engines, systems, and components that enable the deployment of low-carbon fuels such as compressed natural gas (CNG), liquefied natural gas (LNG), hydrogen, and renewable natural gas (RNG). Headquartered in Vancouver, we serve customers in more than 70 countries through 14 global locations and partnerships with leading global transportation brands. In 2017, we earned \$247 USD million in revenues.

Technologies like Westport's proprietary High Pressure Direct Injection 2.0 technology enables the long-haul, heavy duty trucking sector to tackle global climate change and urban air quality without sacrificing power, torque, or fuel efficiency. [Westport HPDI 2.0™](#) can deliver between 20 and 100 per cent greenhouse gas (GHG) emission reductions based on renewable fuel blend; a critical metric as the freight trucking sector's growing GHG emission projections are among the principal obstacles in the fight to combat global climate change. Westport's made-in-Canada clean technologies and partnerships with original engine manufacturers (OEMs) are helping the world bridge the gap with the next generations of emission-reduction and zero-emission technologies for heavy-duty engines.

An innovative approach to regulations

In order to truly transform Canada's economy, our country's innovation strategy must continue the necessary transition from ideas and start-ups to market creation and scale-up. In short, we need to ensure many more promising clean technology successes are able to scale up and drive high-impact growth. We can achieve the benchmarks of a more mature sector, including more commercialized products, established sales, revenues, profitability, and market share, but it is going to take a new approach to established regulatory frameworks.

To overcome these barriers, we will need regulatory policy that is as innovative and nimble as our technologies. We recommend the establishment of an Office of Innovative Regulations that can ensure Canada is not only a place where world best technologies are discovered, but also where companies can scale-up to deliver material economic and environmental benefits. A formal office or secretariat dedicated to solving the regulatory clean technology gap could build a more constructive relationship between regulators and industry.

Under such a model, a secretariat or office would not supersede or replace regulators, but would instead advocate for companies and help them to break down stubborn barriers. Such an office could provide timeline and process certainty that would give companies and investors

the confidence they need to continue investing in projects at various stages of development and risk.

By helping clean technology companies, from start-ups to mature firms ready to scale up, map out regulations and responsible regulators, establishing metrics and sharing information efficiently, a semi-independent body could be a game changer for the sector in Canada and help Canadian companies compete globally.

By finding new ways to agree on benchmarks and share data, this office could also create opportunities for companies to work with regulators to agree on customized pathways toward regulatory renewal that provide confidence to government, industry, and citizens. This office could also oversee the provision of “safe harbours” to allow for the demonstration and testing of clean technologies that includes mutually agreed upon milestones leading to regulatory exemptions when warranted.

Funding for pilot and demonstration projects

Westport is among the Canadian clean tech companies who face a regulatory challenge in deploying commercialized products here at home. Our flagship and proprietary high-pressure direct injection technology, HPDI 2.0, has been successfully commercialized and launched in Europe with our engine manufacturing partner. Two 13L engines (rated at 420 and 460 horsepower), certified to stringent Euro VI regulations and suitable for demanding Class 8 long-haul applications are currently being deployed in key European markets to leading fleets seeking comparable diesel performance and deep greenhouse gas emission reductions. Unfortunately, the path forward on attaining the necessary exemptions to bring HPDI 2.0 to Canada is opaque because such exemptions have never been delivered. In Westport’s case, funding for a pilot project would help pay for testing and logistics required to earn the necessary exemptions to bring HPDI 2.0 technology to Canada in a pre-determined number of trucks.

By allowing these trucks to operate in Canada, this pilot project would:

- Prime the Canadian market for utilization of LNG in freight transportation,
- Closely manage the customer experience to promote early adoption and future uptake,
- Responsibly phase the necessary build-out of fueling infrastructure with partners, and
- Send a positive competitive signal to OEMs to invest in alternative fuel engines for the Class 8 segment.

Westport HPDI 2.0™ technology would not only align with the spirit of existing Canadian regulations by introducing a new, superior and unavailable product into the domestic market, it would also build a pathway toward significantly reducing carbon emissions in the heavy-duty freight trucking sector, which has been identified as a challenge to Canada’s plan to combat greenhouse gas emissions.

Clean Fuel Standard

Of the sectors contemplated by the Government of Canada’s Clean Fuel Standard (CFS), the transportation sector presents a significant opportunity for greenhouse gas reduction simply because it is second largest emissions contributor behind the oil and gas sector. Natural gas vehicles can help achieve the objective of cutting 30 megatonnes, and there are ways to maximize the impact of the sector in this respect. For this reason Renewable Natural Gas

(RNG) should be included in the CFS in order to prioritize its use in the transportation sector - and in order to derive the most significant net reductions in GHG emissions. In order to gain the most benefit from CFS, it should be structured in a way that encourages investments in RNG production and distribution for the transportation sector. California's Low Carbon Fuel Standard (LCFS) data dashboard notes that approximately 70% of the natural gas used in the state's transport sector is renewable natural gas derived from a range of feedstock sources.

In addition, all federal emissions policies should be aligned to ensure the CFS has the greatest impact, and provincial policies should also be considered in order to avoid unintended conflicts.

Incentives to encourage the growth of natural gas sector and ancillary benefits

Freight transportation produces a disproportionately high level of GHG emissions, which creates significant economic and environmental risks as Canada's economy grows. In fact, unlike emissions from passenger transportation and transit which are trending downwards, freight transportation emissions have continued to grow in line with economic growth. There are a number of smart incentives the Government of Canada could institute that would help the natural gas sector grow, displace petroleum, and strengthen both the economy and the environment. These incentives include funds to help demonstrate market solutions, up-front funding for fleets to compensate for a portion of incremental capital costs, and funding for site maintenance, safety and training. We have the opportunity to deploy current market ready, commercially viable and cost competitive alternative fuel solutions for the freight sector.

Sincerely,



Karen Hamberg,
Vice President – Strategy,
Westport Fuel Systems