



***Global Automakers
of Canada***

Remarks Before the Standing Committee on the Environment
Regarding Zero Emission Vehicles

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List of the Recommendations of the Global Automakers of Canada to the Standing Committee Regarding Zero Emission Vehicles

- **Recommendation 1:** That the government focus on its 2030 (and beyond) GHG emissions reductions targets from transportation as opposed to one technology that will not deliver the desired reductions.
- **Recommendation 2:** That the government continue to undertake a comprehensive assessment of the demand and supply dynamics of zero emission vehicles in the Canadian marketplace before pursuing any form of national zero emission mandate.
- **Recommendation 3:** That the government provide re-fund the I-ZEV incentive program as currently more than \$255 million of the \$300 million allocated in May 2019 for a 3 year period for the program has currently been utilized.
- **Recommendation 4:** That the government focus financial and other incentives for ZEVs on high in-use vehicles such as taxis, delivery services and other fleets.
- **Recommendation 5:** That the government work with industry and other partners to develop educational materials and experiences around ZEVs
- **Recommendation 6:** That the government work with the Federation of Canadian Municipalities to require that building codes be amended to require the installation of charging stations in new-build MURBs and other high density living spaces to facilitate ZEV charging. Likewise that hydrogen fueling infrastructure be prioritized in key centres across Canada

Submission Details

Global Automakers of Canada is the national industry association representing the Canadian interests of 15 leading international automakers including BMW Canada Inc., Honda Canada Inc., Hyundai Auto Canada Corp., Jaguar Land Rover Canada ULC., Kia Canada Inc., Maserati Canada Inc., Mazda Canada Inc., Mercedes-Benz Canada Inc., Mitsubishi Motor Sales of Canada Inc., Nissan Canada Inc., Porsche Cars Canada Ltd., Subaru Canada Inc., Toyota Canada Inc., Volkswagen Group Canada Inc., and Volvo Cars of Canada Corp. GAC advocates for sound public policy to support a competitive and sustainable Canadian automotive market. The members are committed to meeting the mobility needs of Canadians by providing greater consumer choice, offering leading-edge safety and environmental technologies, while eliminating unnecessary regulatory and trade barriers.

The 15 member companies and their affiliates directly or indirectly employ more than 77,000 Canadians in vehicle manufacturing, sales, distribution, parts, service, finance and head office operations from coast to coast. In 2019 the member companies of the GAC sold 1,146,587 vehicles representing 60% of the Canadian automotive market and supported over 60% of Canada's 3,300 new vehicle dealerships.

Our members are committed to the decarbonization of the products that they are producing however, it is clear that the goal of decarbonizing the light duty transportation sector can not be achieved by focusing only on new vehicle sales – which represent approximately 8% of all vehicles on the road. It is also clear that we will not achieve our GHG reduction goals for the overall light-duty fleet by focusing simply on the driving the uptake ZEV technology – as opposed to focusing on the real goal of GHG emissions reductions.

Currently in Canada there are about 168,000 ZEVs on the road out a total light-duty vehicle population of approximately 23.5 million vehicles. This equates ZEVs comprising 0.7% of all of the light-duty vehicles currently on the road (Figure 1).

That said, hundreds of billions of dollars are being invested in zero emission vehicle technology globally by automakers , and while COVID-19 has in some cases delayed the introduction of some models it has by no means deterred automakers from the pursuit of the development of ZEVs and introduction of ZEVs. In fact, GAC members alone will have more than 125 BEV and PHEV models brought to market between 2021 and 2025. In this regard is important to underscore that the only real difference between the perspectives of governments, ENGOS, and the automotive industry with respect to ZEVS is the issue of timing.

The automotive industry is going through an unprecedented transition the likes of which it has not experienced before in its 100 year history. This transition is moving forward quickly but will take time. It takes 3-5 years to bring a new model to market and roughly \$1-2 billion and automotive companies must continue to earn profits on their current vehicle mixes to support the development of advanced propulsion vehicles. Additionally, new suppliers and supply chain partners must be developed and cultivated to secure long-term contracts for batteries and other components that are completely new for the production of ZEVs.

As noted, the industry is changing, but it does take time and the change is also responsive to demand, and supply will likely lag demand for the immediate future.

Therefore, short term regulatory intervention in the form of ZEV mandates is out of step with the medium and longer term time horizon of this industry transition.

Recommendation 1:

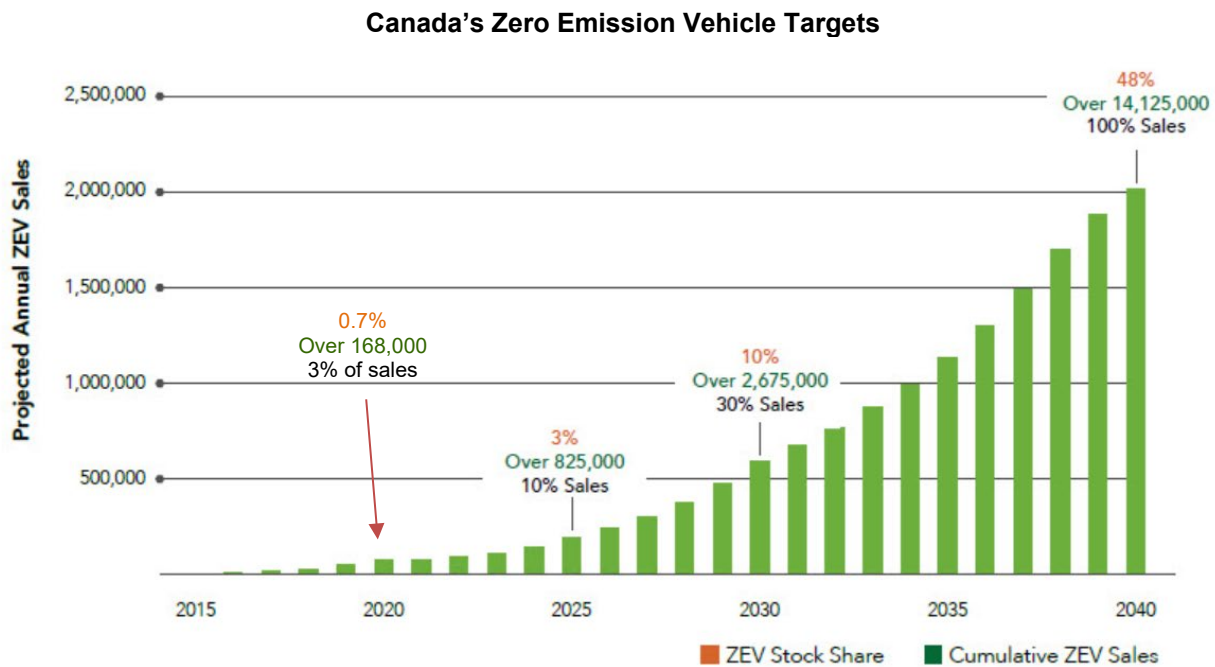
That the government focus on its 2030 (and beyond) GHG emissions reductions targets from transportation as opposed to one technology that will not deliver the desired reductions.

Focusing on the sale one technology (ZEVs) in the light duty vehicle segment will not achieve the government’s 2030 GHG emission reduction goals for transportation – even if the goals for ZEV penetration achieved. However, setting challenging emissions reduction standards for light duty transportation sales will both assist in achieving the 2030 targets as well as driving ZEV penetration.

In addition to emission reduction standards lower carbon fuel formulations under a Clean Fuel Standard will need to be introduced to ensure that the entire on-road fleet of 23.5 million light duty vehicles can realize material emissions reductions. As always, the vehicle and the fuels they utilize are a symbiotic system so any advanced fuel formulations need to be compatible with the vehicles on the road. Currently, there are about 9.6 million vehicles on Canadian roads that are 12 years and older and there will be a need to ensure that these vehicles will be able to operate on any reformulated fuels.

Ideally, both the GHG emission standards for light duty vehicles and any clean fuel standard should be developed in concert with the United States, given the regional nature of the automotive industry in North America and the fact that vehicles will be bought, sold, and travel in either country.

Figure 1



SOURCE: <https://tc.canada.ca/en/road-transportation/innovative-technologies/zero-emission-vehicles>. Accessed 11/15/20

Recommendation 2:

That the government continue to undertake a comprehensive assessment of the demand and supply dynamics of zero emission vehicles in the Canadian marketplace before pursuing any form of national zero emission mandate program

The issues of supply and demand with respect to ZEVs have been widely debated.

The automotive industry responds to consumer demand with supply. As with any commodity the ideal situation for the retailer is to have slightly more demand than supply to mitigate carrying costs of inventory.

To date auto manufacturers and their retail partners have been very successful at meeting the demand for ZEVs as evidenced by the federal I-ZEV incentive program that has been oversubscribed, with more than 85% of the \$300 million established for the fund being claimed through September 2019. This fund was originally projected by Transport Canada to last through 2022.

Some have erroneously suggested that there is a need for a ZEV mandate to force the supply and sale of ZEVs, however it is worth noting that British Columbia achieved a ZEV penetration of 9% of vehicle sales before ZEV legislation was in place. In addition, with all ZEVs currently representing a niche segment, any lack of ZEV availability and consequential wait time at dealerships is not dissimilar to niche ICE vehicles that may also be in high demand.

As the impact of supply and demand measures to facilitate the growth of ZEV sales still remains largely unknown, the GAC recommends that a thorough, independent analysis of the impact of various supply and demand measures be undertaken before the pursuit of any national ZEV mandate legislation .

Recommendation 3:

That the government provide funding in the amount of \$200 million to ensure the continuity of the iZEV incentive program.

As noted above, at the end of September more than 85% of the \$300 million allocated last year to be available through 2022 for federal electric vehicle incentives had been exhausted. It is clear that without a new infusion the existing funds will be exhausted as early as the end of 2020.

While the federal government has aspirational goals to significantly increase the number of zero emission vehicles on the road, Quebec, and more recently B.C. have passed legislation mandating sales volumes of zero emission vehicles. These targets are unlikely to be met without demand-side incentives to ameliorate the price difference between zero emission vehicles and internal combustion engine vehicles, especially given current challenges surrounding COVID, in which gasoline fuel prices have dropped considerably making the payback time for consumers purchasing a ZEV that much longer.

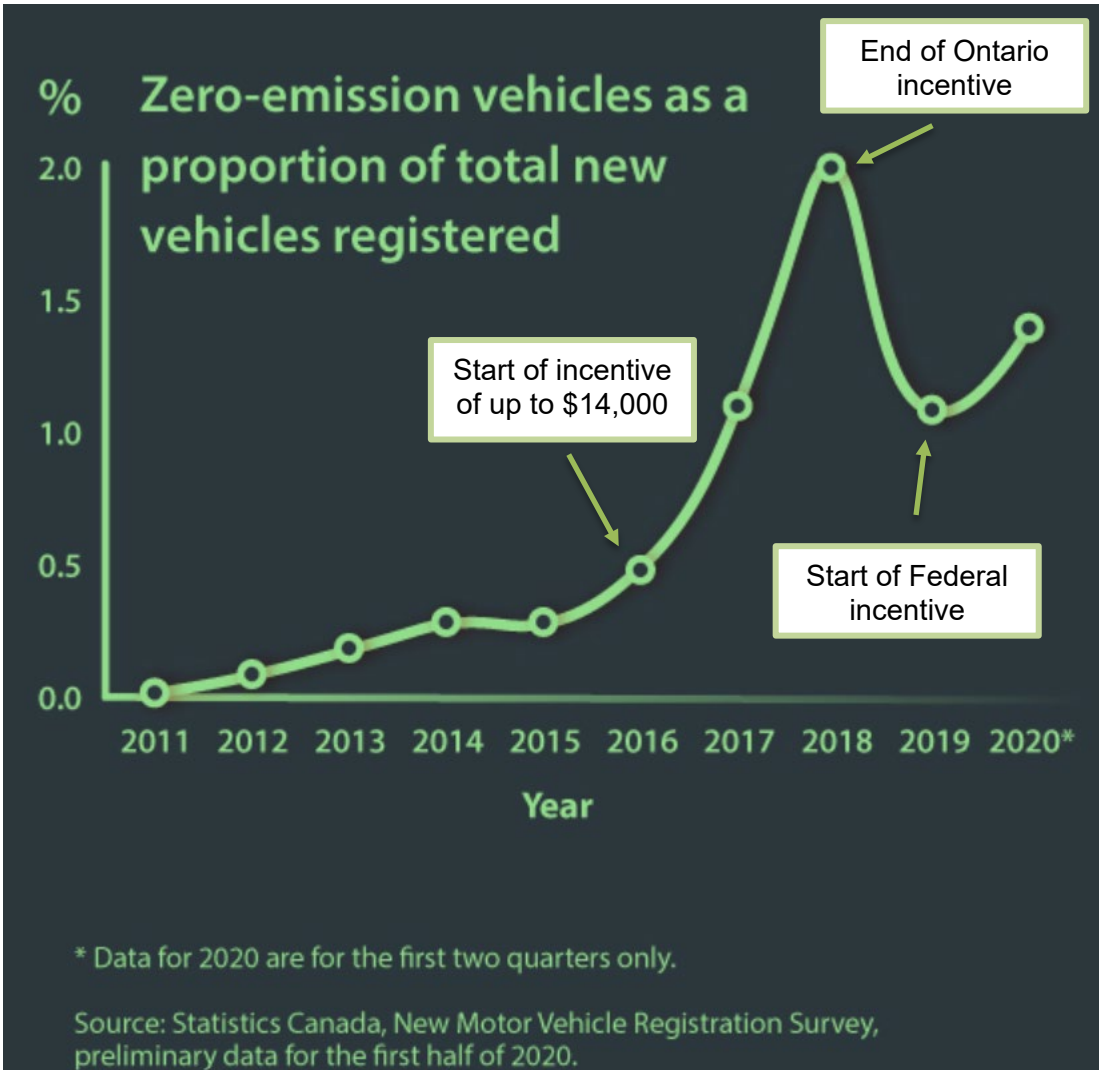
Therefore, the GAC recommends a “top up” of the iZEV program of \$200 million to facilitate the purchase of ZEVs through 2022, in light of the current financial reality of the iZEV funding.

The top up of the federal I-ZEV program is critical because of the cost gap between ZEVs and ICE vehicles that currently exists. While incentives will not be required forever, they will likely be necessary until price parity exists which will not likely be prior to the end of this decade. However,

if we assume – very optimistically – that incentives will be required until only 2025, then the cost of those incentives to achieve the 10% of sales (assume 190,000 vehicles) would be \$950 million in 2025 alone, thus requiring a multi-billion dollar investment from the government between now and 2025 to achieve the 10% of sales target.

The evidence suggests, however, that it is the presence of incentives rather than the presence of a ZEV mandate that drives the uptake of zero emission vehicles. Ontario served as a dramatic case study in this regard (Figure 2)

Figure 2
Ontario Zero Emission Vehicle Sales



SOURCE: <https://tc.canada.ca/en/road-transportation/innovative-technologies/zero-emission-vehicles>.

Recommendation 4:

That the government focus financial and other incentives for ZEVs on high in-use vehicles such as taxis, delivery services and other fleets.

The average light-duty vehicle sits idle for approximately 96% of the time. In order to achieve the maximum utility and benefit from the expenditure of government incentive funds, it is prudent to focus these funds on high in-use vehicles to maximize the emissions reduction potential for the public expenditure.

An additional benefit of incentivizing the adoption of ZEVs by taxis and ride/carsharing services is the exposure of ZEV technology to consumers through first hand experience, especially when it can be somewhat difficult to find ZEVs at local dealerships.

Recommendation 5:

That the government work with industry and other partners to coordinate and develop comprehensive educational materials and experiences around ZEVs

The GAC recommends that the federal government work with industry to both coordinate and develop comprehensive educational materials and experiences around ZEVs as there remains many disparate educational tools about ZEVs available but these are disparate and sometimes have out-of-date and/or conflicting information. ZEV education and exposure has been under-resourced and is essential to encouraging consumers to consider zero emission vehicles. While Natural Resources Canada has funded a Zero-Emission Awareness Initiative to support educational initiatives, the request for proposal application deadline only recently closed and it will be some time before these initiatives are in place.

Ongoing collaborative efforts between government and industry need to be encouraged to ensure basic ZEV literacy in order facilitate the uptake of ZEVs by Canadians.

Recommendation 6:

That the government work with the Federation of Canadian Municipalities to require that building codes be amended to require the installation of charging stations in new-build MURBs and other high density living spaces to facilitate ZEV charging. Likewise that hydrogen fueling infrastructure be prioritized in key centres across Canada

The on-going public investment in EV charging stations and hydrogen fuelling stations will be required to provide Canadians with the confidence that they will be able to refuel/recharge their vehicle when and where they need to in order to eliminate the barrier of range anxiety.

However, it has been determined that the majority of Canadian EV drivers will charge their vehicle at either the home or work. Urban densities work against home charging however if there are no charging stations available where citizens are living in multi-residential unit buildings. To facilitate home charging each municipality would need to be encouraged to require the installation of charging stations in new-builds.

Hydrogen vehicles have different fuelling requirements and home charging is neither cost effective nor practical. Strategic hydrogen station investment in major urban centres will be pivotal to the growth of the hydrogen ZEV vehicle market in Canada.

Summary

In closing , the Global Automakers of Canada appreciates the opportunity to provide these recommendations to the House of Commons Standing Committee on the Environment as it studies Zero Emission Vehicles.