

The COVID-19 crisis:

Measures to ensure the survival of

Canada's high-tech electrification of transportation industry

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Recommendations by Electric Mobility Canada

March 30, 2020

To the honorable minister Bill Morneau,

The COVID-19 crisis is hurting Canadians and the world in multiple ways. From our health, to our economy, the crisis is and will continue to have unprecedented and unforeseen effects on all of us.

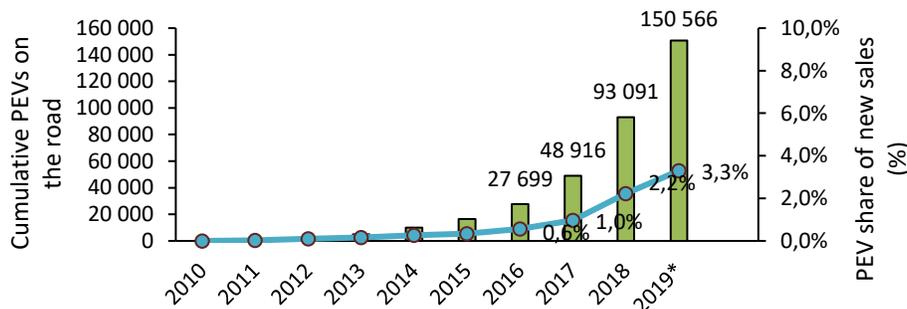
**Its effect on the energy sector: oil and gas, but also electricity and transportation**

COVID-19 is having a serious negative impact on energy sector job security and revenue forecasts. Thousands of Canadians and their families who work in the energy sector are facing very difficult situations. These impacts include not only fossil-fuel-based energy sector participants, but also participants working in the electrification of transportation and other related high-tech industries such as renewable energy and autonomous transportation.

All across Canada, multiple companies build, assemble and sell partial or full electric cars, trucks, and buses as well as boats, charging infrastructure and other components. These companies hire thousands of Canadians, from engineers to construction workers, miners to electricians, mechanics to researchers, factory workers to salespeople. Many of them are presently on the verge of losing or have already lost their jobs, while many small, medium and even large companies are facing serious economic headwinds, making the transition towards clean transportation in Canada more fragile. To add to this uncertainty, the price of oil is presently at a historic low, temporarily inverting the fuel cost economics that usually provide a strong economic basis to support individual and organizational electric vehicle adoption for individuals, companies, institutions and cities. While this is likely a short-term phenomenon, it runs the risk of materially slowing uptake of electric vehicles and achievement of Canada's climate targets.

**Ambitious goals**

Canada has set an ambitious greenhouse gas (GHG) emission reduction goal: -30% for 2030 compared to our 2005 emissions. Transportation is one of the largest sectoral contributors to Canada's emissions, so Canada has also set ambitious EV adoption goals: 10% of light duty vehicle sales by 2025, 30% by 2030 and 100% by 2040. In 2019, we reached 3.3% of light duty vehicle sales. As for buses, school buses, trucks, and other vehicles, we are at the very beginning of a new era that is set to grow exponentially, and which must grow exponentially to achieve Canada's climate targets



*If we let this crisis slow or even stop the electrification of transport in Canada, not only could this potentially mean thousands of good jobs lost all over the country, but it could set our transition toward electric vehicles back by a matter of years. We could end up without a significant transportation electrification industry if bold action is not taken.*

On this basis, we have provided an overview of our industry's growing impact on Canada's economy, and a list of short and medium term requests that we hope your department, and other departments will consider to help us protect Canada's electrified transportation high-tech industry and to position it for growth when the COVID-19 crisis is under control.

Daniel Breton  
President and CEO  
Electric Mobility Canada / Mobilité électrique Canada

## A Few Facts About Canada's High-tech Electrified Transportation Industry

According to “The Energy Fact Book 2019-2020” published by Natural Resources Canada<sup>1</sup>

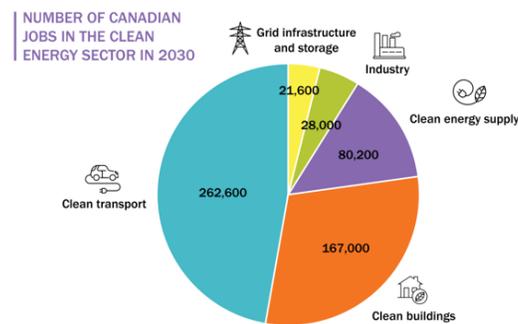
- 1- 60% more people are working directly in the electricity sector than in the oil and gas extraction sector
- 2- Greenhouse gas emissions from electricity production have decreased 42% between 2000 and 2017
- 3- Greenhouse gas emissions from transportation have increased 20% between 2000 and 2017
- 4- Canada's clean electricity sector is a world-leader, consisting of 82% production from non-emitting sources, which is much cleaner than other major electricity producing nations



According to the document “Tracking the energy revolution 2019” published by *Clean Energy Canada* in October of last year<sup>2</sup>:

- 1- Approximately 300 000 people are now working in the clean energy sector in Canada
- 2- This number should almost double by 2030, with a projection of 559 400 jobs
- 3- **Almost half of these will be in clean transportation: 262 600 jobs.**

### Employment breakdown



Our clean energy sector is a huge asset in Canada’s high-tech future and climate fight. Not only does the sector employ a significant number of people, electric vehicles driven in Canada are amongst the cleanest in the world because of our clean electricity. Reaching our emissions reductions goals will necessarily require reducing emissions in the transportation sector through a meaningful shift to light-, medium- and heavy-duty electric vehicles.

1: [https://www.nrcan.gc.ca/sites/www.nrcan.gc.ca/files/energy/pdf/Energy%20Fact%20Book\\_2019\\_2020\\_web-resolution.pdf](https://www.nrcan.gc.ca/sites/www.nrcan.gc.ca/files/energy/pdf/Energy%20Fact%20Book_2019_2020_web-resolution.pdf)

2: [https://cleanenergycanada.org/wp-content/uploads/2019/10/Report\\_TER2019\\_CleanJobsFuture\\_20191002\\_FINAL-FOR-WEB.pdf](https://cleanenergycanada.org/wp-content/uploads/2019/10/Report_TER2019_CleanJobsFuture_20191002_FINAL-FOR-WEB.pdf)

## 9 Short and Medium-Term Recommendations to Support the Electrified Transportation High-tech Industry

**The risk:** liquidity is an important issue facing all electric mobility companies, yet access to equity and debt markets is tightening, just as customers are evaluating their capital expenditures in light of COVID-19.

**The opportunity:** if our industry gets through the COVID-19 crisis and related economic downturn and comes out stronger, it will not only help industry workers directly, it will help our economy, our environment and the health of all Canadians.

We propose the following recommendations for the short- and medium-term:

#	Recommendations	Estimated Budget Impact for fiscal year 2020-2021
1	<p><b>Transport Canada: incentives to EV buyers</b></p> <ul style="list-style-type: none"> <li>-Support the inclusion of as many Canadians as possible in electrifying our transportation sector by continuing the current incentive program announced in the March 19, 2019 budget for the acquisition of light-duty EVs</li> <li>-Increase the MSRP cap from \$45,000 to \$55,000 so that more Canadian auto purchasers have access to the rebate, particularly since automotive spending is likely to decline in the wake of COVID-19. This may also support sales of more models of vehicles coming to market</li> </ul>	\$200 M
2	<p><b>NRCan: expand network of charging stations across Canada</b></p> <p>Expand NRCan's highly important incentive programs that support the development of the charging infrastructure needed to make Canadians feel comfortable adopting EVs for all use cases through the following:</p> <ul style="list-style-type: none"> <li>-Provide a significant increase of the funding for NRCan's ZEVIP program to support expanded installation of Level 2 and fast charging stations in places where Canadian's live, work and play for all vehicle classes including passenger, fleet and buses</li> <li>-Aim to increase the number of funding rounds released over the next 1-2 years</li> </ul> <p>Add new money to build additional EV fast charging stations along Canada's major highways and in urban and rural areas.</p> <ul style="list-style-type: none"> <li>-Aim for up to 5,000 additional public DCFC stations (over and above those previously announced in the Minister's mandate letter) over 3 to 4 years, starting with 1500 locations in the first year.</li> </ul>	<p>\$150 M</p> <p>For Fast charging infrastructures</p> <p>-----</p> <p>\$50 M</p> <p>for level 2 chargers</p>

#	Recommendations	Estimated Budget Impact for fiscal year 2020-2021
	<p>For all charging station investments:</p> <ul style="list-style-type: none"> <li>-Consider expanding the proportion of equipment and installation costs paid by NRCan from 50% to 85% to support higher project uptake and re-invigorate interest in this sector</li> <li>-Provide transit agencies access to financial support for critical charging infrastructure through the ZEVIP program or other mechanisms</li> <li>-Include incentives for critical charging infrastructure at 80% for school buses and trucks, capped at \$50,000 per vehicle</li> <li>-Consider allowing more flexibility to combine government funding for infrastructure and demonstration projects</li> <li>-Provide higher funding for higher powered fast charging stations, but use a per station cap to make sure that the funding is spread all across Canada and that an acceptable ratio of dollars per charging station is achieved</li> <li>-On approved projects, flexibility can be provided by eliminating or reducing “spend it or lose it” clauses and “percentage holdback” provisions</li> <li>-Consider ways to provide earlier cash flow, such as earlier payment milestone dates</li> </ul>	
3	<p><b>NRCan + Transportation: financial support for medium and heavy-duty vehicles</b></p> <p>Support broader transportation sector electrification and help develop Canada's electrified transportation competitive advantage by adopting targets and timelines for converting the following medium- and heavy-duty vehicle modes to electric drive:</p> <p><u>Electric Transit Buses</u></p> <p>In addition to any federal funding programs to municipalities for transit buses, provide financial incentive for 80% of the price differential for zero emission (all electric) transit buses capped at \$150K per bus for 5 years. The government may also wish to accelerate its target for only supporting zero-emission buses from 2023 to all new funding after April 2020. Access to these programs will be most effective if they are aligned with vehicle replacement programs</p> <p><u>School Buses</u></p> <ul style="list-style-type: none"> <li>—Provide financial Incentives at 80% of the price differential between electric and gas-powered buses for electric school buses to private school bus operators and to school boards capped at \$150K per vehicle in FY2020-21 declining to \$75k over 3 years. Where there are no local or provincial subsidies, provide 100% of the price differential for 5 years (until the price is at par)</li> <li>—The government may also wish to accelerate its target for only supporting zero-emission buses from 2023 to all new funding after April 2020. Aim for 5,000 buses by 2025</li> </ul>	<p>\$75 M for transit buses</p> <p>\$75 M for school buses</p>

#	Recommendations	Estimated Budget Impact for fiscal year 2020-2021
	<p><u>Truck, Port &amp; Agricultural vehicles</u> Provide financial incentives at 80% of the price differential for electric trucks to a maximum of \$30K for Class 3 trucks rising to \$150K for Class 8 trucks to support early stage implementation for any all- electric truck</p>	\$30 M for trucks
4	<p><b>Finance: GST exemption on the purchase of new and used EVs and EV charging equipment.</b></p> <p>Support EV sales by exempting electric vehicles (EVs) and EV charging equipment (EVSE) from the Goods and Services Tax (GST). This would apply to MSRP sale prices of up to \$55,000 for new light duty vehicles and \$27,500 for used light-duty vehicles. The government should encourage all provinces to at least match this financial contribution on a per-vehicle basis</p>	Up to \$40 M
5	<p><b>ISED: support for Electric Mobility Canada</b></p> <p>Help develop the analysis and coordination that can expand the development of a world-leading high-tech electrified transportation industry by providing financial support for EMC in the amount of \$4 million over a two-year period to increase its capacity as an industry sounding board and policy support organization for the government and to promote &amp; grow the EV business. Also, to grow its annual conference as the national and North American gathering place for EV decision makers and to identify/promote R &amp; D needs in the Canadian context</p>	\$2 M
6	<p><b>Transport Canada: incentives to buyers of used EVs</b></p> <p>Include Canadians who don't buy new vehicles in the health and economic benefits of electrified transportation by establishing a new all electric used vehicles rebate of up to \$2,000 for used all-electric vehicles and PHEVs</p>	\$8 M
7	<p><b>Treasury Board Secretariat: pre-order vehicles</b></p> <p>Consider measures to support manufacturers of electric school and transit buses to build up inventory of available vehicles and continue production during any COVID-19 caused slowdown. Consider a swiftly implemented government bulk supply agreement, direct federal purchasing and/or working with provinces and municipalities to support immediate order entry for when manufacturing resumes, helping cities, municipalities and other administrations more quickly turn over their fleets while public transit ridership is lower.</p>	\$50 M

#	Recommendations	Estimated Budget Impact for fiscal year 2020-2021
8	<p><b>ECCC: Clean Fuel Standard</b></p> <p>Canada's Clean Fuel Standard is in integral part of the Pan Canadian Framework and can provide important economic and jobs stimulus to the electrified transportation industry if Canada:</p> <ul style="list-style-type: none"> <li>-Implement the Clean Fuel Standard by 2022 as planned</li> <li>-Ensure the CFS has a strong price signal that supports EV charging infrastructure deployment and electrical grid resilience</li> </ul>	---
9	<p><b>Treasury Board Secretariat: green federal parking lots and fleets</b></p> <p>Show Federal leadership and support Canadian economic activity by more aggressively replacing more federal gasoline and diesel vehicles with zero emission vehicles (light, medium and heavy-duty) where possible across all departments and their agencies, and support federal working in greening their commutes. Include targets for both EVs and EV charging stations.</p> <ul style="list-style-type: none"> <li>• Install EV chargers at all federally owned parking facilities (including crown corporations)</li> <li>• Require all new or retrofitted federally owned or leased buildings to be EV-ready for fleets, employees and visitors</li> <li>• Allow federal employees to charge their own electric vehicles at these buildings</li> <li>• Train federal employees + contractors on the benefits and the use of EVs and related infrastructure</li> <li>• Replace existing shuttle buses on Parliament Hill with e-buses</li> <li>• Look for ways to electrify all Crown Corporation operations</li> </ul>	\$50 M