

February 7, 2022

Honourable Rob Fleming
Minister of Transportation and Infrastructure

Honourable George Heyman
Minister of Environment and Climate Change Strategy

Via email: [REDACTED]

Re: BC's Zero-Emission Vehicle Mandate for Commercial Road Transportation Sector

Dear Minister Fleming & Minister Heyman:

I am writing on behalf of the BC Trucking Association (BCTA) to advocate for a province wide zero-emission vehicle (ZEV) mandate for BC's medium- and heavy-duty commercial road transportation sector in support of the fight against climate change. Consistent with the province, a key priority of BCTA is sustainable transportation to address the climate emergency. We are actively working with our industry through BCTA's Sustainability Committee to help identify measures our sector can take today and in the future to reduce our sector's carbon footprint.

Specifically, we are seeking support from the Province of BC to legislate a province wide ZEV mandate for BC's commercial road transportation sector, as follows:

- All new medium-duty vehicles (>4,527 kg, <11,794 kg) sold in BC be zero or low emission vehicles by 2050; and
- All new heavy-duty vehicles (>11,794 kg) sold in BC be zero or low emission vehicles by 2060.

The intent of this mandate is to accelerate the adoption of zero emission commercial vehicles, while recognizing that:

- Long range medium and heavy-duty ZEVs are currently not available and that more than two-thirds of heavy-duty commercial vehicles operate in the long-haul sector;
- Short haul/city medium and heavy-duty commercial ZEVs are in the emergent state with the first heavy-duty commercial ZEV being operated in a trial capacity on BC's roads last July; and
- Medium- and heavy-duty ZEV cost, reliability and charging infrastructure remain significant barriers for adoption, which the BCTA, Sustainability Committee is working to address through pilot projects, infrastructure requests, and incentive programs.

Climate Issues for Goods Movement

Medium- and heavy-duty (MHD) commercial vehicles are responsible for approximately 50% of greenhouse gas (GHG) emissions from BC's road transportation sector. According to the Insurance Council of British Columbia (ICBC), approximately 60,000 heavy-duty vehicles (>11,794 kg GVW) and 156,000 medium heavy-

duty vehicles (>4,527 kg, <11,795 kg GVW) that support goods movement are ICBC commercially insured in BC.

However, with our sector transporting 92% of all consumer goods in our province by weight, over the past decade BC's transportation sector grew by an average of 4,049 MHD vehicles each year. The principal cause for growth in our sector is directly attributed to two factors:

- Growth in BC's population by approximately 580,000 over this period; and
- Growth in e-commerce, which realized a 58% increase of average number of online purchases from 2016-2018 and a 26% increase in freight being delivered to major cities¹, which nearly doubled in 2020 due to the COVID-19 pandemic.²

As a result of this growth, GHG emissions from BC's MHD transportation sector grew by 27% over the past decade (2007-2018), and BCTA modelling is forecasting growth of 17.3% by 2030. This growth is at odds to the government's Roadmap to 2030 that indicates a mandate of 27-32% from 2007 levels by 2030³. Additionally, this growth has also resulted in the establishment of a ZEV sale mandate for passenger vehicles by 2035 and is calling on a provincial MHD mandate to be established by 2023. Specifically:

- The Province is calling for a ZEV target for MHD vehicles in alignment with the state of California which requires 100% MHD vehicle sales to be ZEV by 2045 and drayage trucks to be ZEV by 2035; and
- Metro Vancouver (Clean Air Plan) is calling for medium-duty vehicles to be ZEV by 2050 and heavy-duty vehicles to be ZEV by 2060.

While significant progress has been made to reduce passenger vehicle emissions, this is not the case for MHD vehicles, which remains in very early development. The market for commercial transport is in the emergent state, with ZEV solutions for MHD vehicles starting to be deployed. Costs remain high and the commercial market is behind the personal market. That said, nearly all major original equipment manufacturers have publicly announced that MHD vehicles will be available by around 2023/2024.

Additionally, a key priority for BCTA and BC's road transportation sector is to reduce our carbon footprint in a manner that does not unduly affect the affordability of goods that British Columbians rely on. Reducing industry's risks and associated concerns with ZEVs, such as operational reliability, range capacity, and charging time uncertainty/refueling options (e.g., hydrogen) are critical in achieving this goal. It is also a critical requirement to expedite industry's adoption of these vehicles, recognizing the price differential between a ZEV and a conventional diesel vehicle is likely to remain significant for the next decade. For example, a conventional city Class 8 day cab tractor costs on average approximately \$180,000-\$200,000 whereas an electric Class 8 day cab tractor with a 400 km range costs approximately \$580,000 — a price differential of up to \$400,000. This price differential coupled with unknown vehicle reliability and therefore an unknown pay-back period are barriers that need to be addressed prior to any consideration being given to accelerating the adoption of these vehicles.

In the past, the promotion and delivery of alternative fueled, low-emission vehicles has had mixed success, due in part to a lack of understanding of industry concerns and risks. An indicator of BC's passenger ZEV adoption, which after more than a decade of both market access and availability, shows that ZEVs only make up 1.57% of the insured vehicles on our roads with a total electric vehicle count of just 40,074 in 2020 relative to 2.54 million insured passenger vehicles province wide.⁴

¹ Pembina Institute. *The next frontier for climate action, Decarbonizing urban freight in Canada*. February 2020, updated July 2020

² <https://www150.statcan.gc.ca/n1/pub/45-28-0001/2020001/article/00064-eng.htm>

³ Government of BC. *Roadmap to 2030*. October 2021.

⁴ Insurance Corporation of BC. *Vehicle Population Data* (2020 Passenger Vehicle Data).

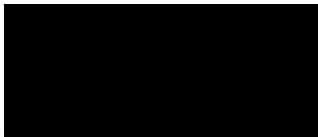
The Path Forward

BCTA has worked diligently to produce modelling data that considers a suite of metrics to determine what level of GHG reduction our industry can achieve. Taking variables such as future population growth rates, average age of MHD vehicles, average commercial vehicle turnover rates, fuel efficiency gains associated turning MHD vehicles over, and the availability of near zero and zero-emission MHD vehicles into account, our sector's GHG emissions are expected to grow by approximately 17.3% over the next decade (2020-2030). Considering these metrics, we forecast that approximately 20% of vehicle fleets will be ZEV or lower emitting vehicles by 2040, which is consistent with BloombergNEF Global EV Outlook 2021: Commercial Vehicles.⁵ To reduce our sector's carbon footprint and help the Province achieve its emissions targets, BCTA recommends the following for a province wide zero-emission vehicle mandate for BC's commercial road transportation sector:

- All new medium-duty vehicles (>4,527 kg, < 11,794 kg) sold in BC be zero or low emission vehicles by 2050; and
- All new heavy-duty vehicles (>11,794 kg) sold in BC be zero or low emission vehicles by 2060.

We look forward to working collaboratively with your ministries in meeting our shared objectives as we evolve to a lower carbon future. Should you have any questions, please contact me or BCTA Vice President, Cory Paterson, at CoryP@BCtrucking.com or 604-888-5319, ext. 211.

Sincerely,



Dave Earle
President & CEO

e: DaveE@BCtrucking.com
m: 604-787-1335

Cc: Kathryn Krishna, Deputy Minister of Transportation and Infrastructure
Steven Haywood, Executive Lead of Transportation and Infrastructure

⁵ <https://www.bloomberg.com/professional/blog/bloombergnefs-global-ev-outlook-2021-commercial-vehicles/>