



The Hon. Chrystia Freeland, P.C. M.P.

Minister of Finance & Deputy Prime Minister
Department of Finance Canada
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Delivered via email: chrystia.freeland@parl.gc.ca
and via web upload to the Standing Committee on Finance's pre-budget consultations in advance of the 2023 budget

Re: 2023 Canada Federal Budget Proposals

Dear Minister Freeland,

I am writing to share with you Tesla's proposals for budget consideration as you prepare Budget 2023. Tesla and the Government of Canada share a common goal: accelerating the adoption of sustainable energy. Tesla supports the Government of Canada's continued efforts to address climate change and to transition Canada to a sustainable energy economy.

Our proposals below are generally focused on enhancing value for money with regard to existing public expenditures and stimulating private investment to support the adoption of zero emission technologies in a fiscally responsible way.

Electric vehicle policy is best divided into three categories. Action in each of these categories is always required to achieve the greatest environmental outcomes and value for dollar spent:

- Demand policy: addresses perception and economic barriers (including through education, financial and non-financial incentives) that shift consumer behaviour and attitudes away from vehicles that utilize combustion and pollute and towards zero emission options.
- Infrastructure policy: ensures consumers can charge at home and on the road, creates economic conditions for private charging operators to thrive and grow, and eliminates regulatory barriers impeding fair pricing.
- Supply policy: attracts limited global EV supply to Canada, promotes innovation, long-range products (which are in greatest demand) and product cost reduction through increased supply and economies of scale. The environmental efficacy of these programs requires rules to be binding and not voluntary.

Canada has taken effective action on generating demand and investing in infrastructure but still needs to improve on its supply policy. Underinvestment in supply arguably undermines value for dollars spent on demand and infrastructure. Tesla proposes below some areas of focus for the government to accelerate the transition to electric vehicles and sustainable energy.

A) EV Charging Investments

1. Establish a refundable tax credit for companies that invest in Level-2 EV charging infrastructure

To further stimulate investment in EV infrastructure, a refundable workplace charging tax credit could be very effective. We propose that the government consider establishing a credit of \$850/stall for workplaces that equip at least 5% of their parking stalls with charging posts (EVSEs). This level of credit is equal to about 30% of EVSE and installation costs for a large site where total costs per stall would be approximately \$2,700 (Level 2).

A fixed credit value (rather than, for example, a 30% tax credit) will encourage additional price competition in the market and will likely lead to more charging posts being installed at lower cost to government.

We recommend the tax credit be refundable given the current economic situation. Refundability could be reviewed in future along with the credit value, as charging infrastructure costs decline over time.

2. Take the lead on establishing DC Fast “charging hubs” in Canada’s most expensive real estate markets as DC charging is not otherwise economical to develop in those settings

Developing DC fast charging is challenging at the best of time. It becomes even more challenging when working in Canada’s most expensive urban real estate markets. In these markets, the following challenges often emerge for charging operators:

- Multiple competing land uses interests;
- High costs of land;
- Demands for high rent or site access fees that undermine the ability of charging operators to recover costs;
- Power restrictions; and
- Gated, fee-based parking garages that undermine economics of EV ownership and deliver few charging customers.

For those without EV charging in their condominium, apartment or at their house (where street parking is often the only option), purchasing an EV can be a challenge. To address this, Canada could take the lead in identifying and preparing two or three parcels of land in each of Canada’s highest-cost real estate markets that could be established as “Charging Hubs.”

In this proposal, a Charging Hub is a site with between 30 and 50 parking stalls that is owned or facilitated by the Government, and which has on-site power capacity (only) for EV charging stations. The intent would be to allow charging operators to establish themselves in the Hub without a fee, but they would pay for the full capital cost of their equipment, its installation, and electricity submetering. The charging operator would also pay the full operating cost of electricity consumed by their equipment and cover all maintenance and other operating costs associated with their equipment on an ongoing basis.

Government would make the site available for 10 years. At the end of the 10-year period, the government would continue to own a significant and well serviced parcel of land that could be maintained as a charging hub or sold when the EV charging market becomes more mature.

Charging hubs further encourage price and service quality competition. For this reason, it is vital that no exclusivity ever be offered to any charging operator on the site. These facilities should be inclusive and welcoming to all EV drivers and vehicle brands. They would ideally be situated near good amenities.

To achieve this outcome, NRCan could work with Canada Lands, other federal agencies or multi-party agencies in which Canada has a stake (e.g. Waterfront Toronto, ports, airports).

3. *Target EV infrastructure investments where they will have the greatest impact: existing multi-unit residential buildings*

Tesla applauds the Government of Canada's commitment to investing in EV charging infrastructure. However, based on our experience in engaging with prospective EV drivers in Canada, the most significant challenge facing EV charging infrastructure at this stage in the market's development is not with highway-side or other public charging, but with access to charging at home, in multi-unit residential buildings (MURBs).

According to Statistics Canada's 2021 census, approximately 10 million Canadians, or about one-quarter of all Canadian residents, live in multi-unit dwellings, including apartments and condominiums.¹ Since 90% of charging typically takes place at a driver's home, ensuring that the occupants of those multi-unit dwellings have a place to charge would offer the Government of Canada the greatest return on its charging infrastructure investment. This is a Canada-wide challenge and would benefit from federal leadership.

It has been demonstrated that the private sector is willing and able to take the lead in developing public charging infrastructure. The Government should instead focus public dollars—including through the Canada Infrastructure Bank's recently announced \$500-million Charging and Hydrogen Refuelling Infrastructure initiative—where the EV charging market is most nascent: in apartments and condominium settings. The initiative recommended by Tesla would not fund charging connector installations. Rather, grants would subsidize up to 75% of the costs associated with:

- a building's electrical power capacity upgrades;
- electrical room retrofits; and
- electrical sub-panel installations throughout parking garages, such that every parking stall is within a reasonable distance of a sub panel (max. 30 meters to ensure no single resident has to carry a disproportionate cost to connect their stall).

This will have the added benefit of enabling millions of Canadians to access EVs and supporting Canada's clean air and climate change goals without increasing government spending on charging infrastructure.

B) Medium and Heavy-Duty Transportation Electrification

1. *Support investments in Medium and Heavy Duty Zero Emission Vehicle (MHDZEV) fast charging infrastructure*

Tesla applauds the launch of the federal Government's iMHZEV Program as sales incentives should generate demand for MHDZEVs across the country. However, to sustainably support increased demand for electrified medium and heavy-duty transportation fleets, adequate charging infrastructure must be available to support short and long-haul transportation routes from coast to coast.

¹ Statistics Canada. Table 98-10-0040-01 Structural type of dwelling and household size: Canada, provinces and territories, census metropolitan areas and census agglomerations with parts

Federal support can efficiently incentivize private-sector investment in MHDZEV charging along key transportation routes. Similar to the benefits of NRCan’s ZEVIP program, federal support can accelerate private-sector investment and deployment of DC Fast Charging for MHDZEV. The federal Government should identify good movements charging corridors across the country to target incentives toward. While the industry is just beginning to transition to zero emission trucks, it is critical that the federal government support the charging infrastructure necessary to scale electrification of the good movement sector.

2. Support electrical power capacity upgrades for heavy trucking at distribution and retail centres

Electric trucks provide a good return on investment for businesses, but power upgrades for charging can be a significant one-time capital expense that may discourage some freight carriers. This can be addressed by establishing a government program to provide grants to freight haulers in support of the capital costs associated with installing upgraded or new electrical services needed to charge electric trucks. This type of program would support the deployment of heavy duty electric trucks, create jobs in the construction and electrical trades in the near term, deliver air pollution and greenhouse gas reductions and help trucking businesses lower their total costs-of-doing-business.

With so many different types of medium- and heavy-duty electric trucks in development, the government is best positioned to help address power capacity needs, rather than specific charging needs at this stage. Supporting power capacity upgrades will also help in the transition to electric refrigeration for many freight haulers, further reducing GHG emissions. In short, focusing on power capacity allows government to remain technology agnostic while facilitating a key investment that will serve all future electric freight needs, regardless of brand or truck type.

We propose a program that would directly support all freight haulers of all sizes -- not just the largest or smallest fleet operators. It is important to note that power upgrades must be made well in advance of companies taking delivery of electric trucks. Charging facilities must be in place when the trucks arrive so that they can enter service immediately. Government should consider providing funding to any company that can demonstrate it has placed electric truck orders -- rather than deliveries.

Additionally, we propose eligible expenses under this program include utility and site design, site engineering costs associated with utility services, utility offers-to-connect and other one-time utility levies, switchgear, transformers and the installation of the above. For facilities of between 0 and 1.99MW, consider grants to cover the above expenses up to \$200,000 per site. For connections larger than 2.0 MW, consider larger grants as connection costs will be considerably higher. There may also be a need for some facilities to deploy behind the meter solutions to mitigate electricity demand/peaking on the grid such as energy storage and renewable generation. Government may want to consider including these types of technologies in its program design.

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Tesla has over 1,300 Canadian-based employees in sales, service, delivery, advanced manufacturing, research & development, engineering, infrastructure deployment and more. Tesla operates three research and development facilities in Canada (Mississauga, Richmond Hill and Halifax) that are enabling breakthroughs in battery longevity, cathode materials and advanced manufacturing.

There is a bit of Canadian innovation in every Tesla: our manufacturing plants in Richmond Hill and Markham design and engineer the battery assembly line equipment deployed to our factories around the globe. Tesla vehicles also contain Canadian-made parts. Since early 2018, Tesla’s direct and indirect



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economic contribution to Canada for supply chain, infrastructure, employment and R&D exceeds \$830 million.

Thank you for your consideration on these matters.

Yours sincerely,

A handwritten signature in black ink that reads "Audrey Dépault". The signature is fluid and cursive, with a large initial "A" and a long, sweeping underline.

Audrey Dépault
Senior Advisor, Public Policy and Business Development