

Priority Policies for Transportation Electrification

2024 pre-budget recommendations

By Electric Mobility Canada - Mobilité Électrique Canada

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IMPORTANT - Access the full version of this document here:

https://emc-mec.ca/wp-content/uploads/2023/08/August-4-2023-EMC-2024-pre-budget-Recommendations-FULL-.pdf

Light Duty Vehicles

1.1 ZEV rebates

The ZEV rebate program should be based on the price relative to electric range. If a given trim of a Zero-Emission car, crossover, or SUV costs less than \$145 (MSRP) per kilometer of range, it should be eligible. If a trim of a ZEV pickup truck costs less than \$180 per kilometer of range, it too should be eligible. All ZEVs under \$45,000 should remain eligible, regardless of their price-to-range value. Plug-in hybrids should also be eligible for rebates if they offer at least 80 km of electric range. BEVs priced above \$100,000 should be exempted from the federal luxury tax.

1.2 Feebate system

A feebate system where purchases of the most polluting new vehicles would be subject to polluter-payer fees would fund ZEV rebates. Until all categories of vehicles are available in an electric version, exemptions can be proposed for larger families and people who need bigger vehicles for work.

1.3 Low- and modest-income households

Canada should establish an income-tested incentive program to make ZEVs more accessible for low- and modest-income consumers inspired by the California and BC programs.

1.4 iZEV cap for fleets

The iZEV cap for high-use vehicle fleets, such as taxi, carshare, rideshare, and ride-hailing companies **should be removed** as these vehicles must be electrified in priority.

1.5 EV education and salesforce training

We recommend working with trusted EV organizations to educate consumers through EV awareness programs and support the industry salesforce through training programs to facilitate EV sales.

1.6 A green scrappage program

All polluting vehicles-from cars and trucks to buses to off-road vehicles- could be scrapped and recycled as part of a green scrappage program to accelerate clean mobility transition through dedicated EV rebates *or* public transit passes, vouchers for bicycles, carshare and rideshare services for Canadians not looking to purchase a new vehicle.



Medium-, Heavy-Duty, and off-road Vehicles

2.1 Affordable Electric transit buses

We recommend continuing predictable and long-term funding for municipalities and transit agencies to help them convert their entire fleet buses to electric.

2.2 Electric school bus adoption

We recommend predictable and long-term funding for school bus operators to convert their entire fleet to electric through a more efficient version of the ZETF program to make funding more readily available. Incentives should be stackable with other federal and provincial programs and include vehicles with final assembly in Canada, sold and serviced through Canadian businesses.

2.3 Electric trucks in commercial fleets

Accelerate business cases for ZEV medium- and heavy-duty fleets with funds for transition planning and for the purchase of electric trucks.

2.4 Electrify fleets in ports, airports, and federal facilities

Phase out fossil-fuel vehicles at federally regulated properties, such as water ports, intermodal railyards, parks, and airports, through a combination of tolls on polluting vehicles, obligations for subcontracting operators, and restrictions on access for polluting trucks.

2.5 Flectric off-road vehicles

We recommend:

- A \$2500 federal rebate for the purchase of an electric snowmobile, personal watercraft, ATV, or any other personal off-road vehicle used for work or pleasure.
- A ZEV mandate for small off-road vehicles in line with the most ambitious jurisdictions in North America.
- A luxury tax exemption for zero emission vessels.

2.6. Electrification of ferry services

The federal government should work with regional or provincial ferry agencies to financially support the electrification of ferry services across Canada *while creating a Canadian zero emission marine industry.*

EV Charging Infrastructure

3.1 EV charging infrastructure targets

Set targets aligned with NRCan's latest reports on *public and residential* infrastructure needs in key areas such as apartment buildings, workplaces, downtown cores, highways, remote travel corridors, fleet depots and set specific targets for northern, rural, and Indigenous communities.



3.2 One-million condominium and apartments EV ready over four years

Nearly 30% of Canadians live in apartments or condominiums. Allocate \$1 billion over four years to make one-million existing condominium and apartment parking stalls EV-ready.

3.3 Add EV charging requirements to national building codes

Establish provisions in the upcoming review of the National Model Building and Electrical Codes to have all new residential parking spots be "EV-ready" and 20%-40% of new non-residential parking spots to include the basic electrical infrastructure needed for EV charging.

3.4 Underutilized government-owned lands to work

Establish charging hubs on underused government-owned lands, particularly in high-density urban areas, open to all charging operators without exclusivity, and accessible to the public.

3.5 Connection rebate to cover utility costs

Moving freight and large volumes of passenger vehicles requires electrical service upgrades to accommodate the power needs of large-scale charging infrastructure. We recommend supporting charging investments by providing time-limited rebates for large-scale charging investments.

3.6 EV charger installation in home energy retrofit programs

Most Canadians live in single detached houses. Older homes often have outdated electrical panels, making it more difficult to install an EV charger. Existing home energy retrofit programs should support the installation of newer, more efficient electrical panels and EV charging infrastructure, including panel size and smart panel upgrades.

3.7 Funding programs for MHDV charging infrastructure

Establish a dedicated grant-based incentive program to support the deployment of large-scale EV charging installations and electrical service upgrades, to facilitate the medium- and heavy-duty segments, particularly in the truck sub-sector, currently not considered under the current CIB program. The program should support charging infrastructure design and deployment for MHD commercial and public fleet depots, including funding for urban hubs, highway-side locations, and rest-stops. As-a-service offerings that shift charging solutions to Opex rather than Capex should be eligible for funding.

3.8 Technology-based solutions

Funding programs should offer flexibility for innovative charging solutions such as software-based charging management solutions to optimize charging load by shifting and shaping demand, sharing power intelligently between vehicles and other load sources, and mobile charging solutions to complement static charging infrastructure, especially for underserved and urban areas with grid limitations.



3.9 Right to charge rules

The federal government should support provincial "Right to Charge" rules for residents of multifamily properties by allowing them to pursue adding EV charging infrastructure for their use in most circumstances.

3.10 Rural, remote, and off-road access to charging.

Rural, remote, and off-road regions do not always have access to sufficient electricity supply that can accommodate charging infrastructure for light-, medium-, heavy-Duty and off-road electric vehicles. These regions should be supported in making level 2 and fast charging infrastructure accessible, especially if they are off-grid, with green-innovative charging solutions.

Federal Regulation

4.1 A national ZEV sales regulation

Canada should adopt a federal ZEV sales regulation to ensure that ZEV supply is available in provinces without their own regulation of equal or greater stringency, relative to the federal program. (see details here: https://emc-mec.ca/wp-content/uploads/2023/05/ZEV-Standard-Best-Practices-EN-FINAL.pdf)

4.2 Strong tailpipe emission standards

Canada must align its auto tailpipe emission standards with the toughest standards in North America for LDVs and MHDVs. Standards should not be footprint based since it entices car manufacturers to sell larger, less efficient vehicles.

4.3 A national ZEV sales regulation for medium and heavy-duty trucks and buses

We recommend adopting a sales regulation to achieve 100% Zero-Emission bus and truck sales by 2040 at the latest aligned with the most ambitious targets in North America with interim milestones along the way.

A Canadian EV Action Plan

5.1 A Canadian EV Strategy

Enact legislation requiring the federal government to (1) establish an EV strategy, and (2) maintain and regularly update an EV action plan through 2035. Accountability measures, such as audit, should be established.

5.2 Helping rural, northern, First Nations and Inuit communities go electric

Many rural, northern, and Indigenous communities in Canada have not yet had equal opportunity to participate in the benefits of the EV transition due to a lack of charging options and vehicle availability, among other things. These barriers must be addressed to allow them a meaningful opportunity to drive electric.



5.3 Attracting EV-related investment in Canada

Focus on attracting more investment to accelerate EV manufacturing and related industries in Canada, including assembly, parts, machinery, charging equipment, and battery making, critical battery materials extraction/processing with a "Canadian EV Economic Development and Investment Attraction Strategy."

5.4 Focus R&D investments on strategic EV technologies

Canada should focus its efforts on accelerating technologies, research, development, and manufacturing associated with reducing the costs of vehicle batteries and thus vehicle costs per unit of range. Finally, to keep Canada competitive, create new financial instruments to support domestic EV-related R&D and manufacturing, including MHDV, off-road, marine and rail vehicles and ecosystems.

5.5 Working with provinces to fast-track EV-only service technician training

Work with provinces to revamp the vehicle mechanic curriculum to prioritize EVs by fast-tracking training for EV mechanics and provide them with more apprenticeship opportunities. As more EV batteries will need repair, help create a dedicated program to make EV battery repair as affordable as possible and lower EV insurance.

5.6 A North American approach to EV manufacturing

Collaborate with the U.S. to build a North American EV industry and supply chain *beyond the Inflation Reduction Act.* Ensure policies are designed in a way that maximizes and accelerates ZEV and ZEV infrastructure deployment.

5.7 Retraining programs and help workers

Building a labor force with the right skills will be critical to the success of Canada's transition to a zero-carbon economy. Explore opportunities for the government to support employers, whether traditional industry or all-EV, to train new employees who have not previously worked in the EV industry. Maintain existing funding commitments for training and re-training.

5.8 Electrification of the mining sector

Support electrification at mining locations across Canada and promote sustainable mining development and operations, particularly in relation to minerals and metals needed for the ZEV supply chain in Canada and other jurisdictions.

5.9 Supporting EV battery circular economy

We recommend that the government modernizes the legislative and regulatory framework to facilitate the transportation of used and end-of-life batteries and to encourage battery recovery, repurposing, remanufacturing, and recycling in North America.



Federal leadership

6.1 A "Privy Council Office for Electric Transport"

Create a dedicated Privy Council Office to coordinate EV responsibilities across departments and advise the Prime Minister on progress being made towards achieving the government's electrification goals.

6.2 Convening electricity stakeholders to develop EV solutions for our grid

Establish cross-Canadian guidance for electricity regulators to speed up deployment of charging infrastructure through an intergovernmental table to examine electrical system regulatory matters to expedite EV charging infrastructure installation and to support utilities Work through the Council of Canadian Energy Ministers to establish pan-Canadian guidance for electricity regulators to expedite deployment of charging infrastructure.

6.3 Government & parliamentarian EV awareness a priority

The government should make education a priority, working with leading Canadian EV organizations to establish experiential learning opportunities for elected officials and civil servants.

6.4 Federal fleets and buildings 100% electric and EV-ready

Starting now, every vehicle purchased by the government should be electric, unless an electric option does not yet exist to meet a specific need. Canada should also start electrifying its owned and leased parking lots immediately to offer charging options to its fleets, employees, and visitors. Set a hard target of at least 10% of all owned and occupied parking spaces being electrified by no later than 2025.

6.5 A Zero Emission Zone in Ottawa

Canada should work with the National Capital Commission and the City of Ottawa to establish a Zero Emission Zone (ZEZ) in Ottawa. ZEZs are areas in which polluting vehicles are required to pay a fee to enter, acting as a disincentive for gas-vehicle use, and encouraging forms of zero emission travel such as EVs, bicycles or electric public transit.

6.6 Clean procurement policies across Canada

"Clean procurement" policies instead of lowest bidder policies could help Federal departments, agencies and crown corporations, provincial governments, municipal governments, transit agencies, ferry agencies, school boards and other institutions transition to zero emission vehicles without conflicting with free trade agreements.

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