

# **Learn More:**

**Electric Vehicle Regulations BC and Canada Perspectives** 

British Columbia and the Canadian federal government have implemented a suite of regulations, and support programs to promote the transition of fleets to electric vehicles (EVs). Together, these complementary policies create a robust framework to encourage fleet electrification, reduce greenhouse gas emissions, and advance Canada's climate targets. This article examines the regulations that collectively support the adoption of EV fleets in BC and across Canada.

#### 1. Regulatory Support for EV Fleets: BC's ZEVA and Federal Mandates

Both BC and the federal government have established mandates to accelerate the adoption of zero-emission fleets. British Columbia's Zero-Emission Vehicles Act (ZEVA) mandates that by 2040, all new light-duty vehicle sales in BC must be zero-emission. The act is aligned with provincial emissions reduction goals and provides a regulatory framework that guides fleet operators in planning for long-term compliance. Specific mandates for medium- and heavy-duty vehicles are still under development.

At the federal level, Canada has committed to a 100% zero-emission light-duty vehicle sales target by 2035, with interim goals requiring that 20% of sales be zero-emission by 2026 and 60% by 2030. In addition, 100% of new medium- and heavy-duty vehicle sales tare required to be zero-emission by 2040, where feasible. These targets are a part of Canada's comprehensive strategy to meet its 2050 net-zero emissions goal and align with international climate commitments. By setting clear ZEV targets, the federal government provides a framework that fleet operators across provinces can reference to stay ahead of regulatory requirements (Government of Canada, 2022).

## 2. Infrastructure Development for Fleets: Provincial and Federal Collaboration

Both BC and federal programs prioritize the development of charging infrastructure essential to fleet operations. In British Columbia, the BC Electric Highway connects EV chargers along major corridors from the Lower Mainland to northern BC. By strategically installing DC fast chargers along frequently traveled routes, the Electric Highway ensures that fleets have access to reliable charging options. Complementing this initiative, the BC Hydro Fleet Electrification Program offers tailored support for fleet operators, from energy assessments to infrastructure planning and installation, helping organizations build robust and scalable charging systems suited to their operations (BC Hydro, 2023).

## 3. Interoperability and Safety Standards

Both provincial and federal levels emphasize interoperability and safety for charging infrastructure. Open Charge Point Protocol (OCPP) is widely adopted across Canada to ensure compatibility between EV chargers and network operators, facilitating seamless access for drivers using multiple charging networks.

British Columbia and federal regulations also promote the adoption of the North American Charging Standard (NACS), ensuring compatibility with a broad range of EV models, including those with CCS (Combined Charging System) connectors. This standardization supports fleet flexibility, allowing organizations to manage diverse EV models within their operations.

For safety, Canada's Canadian Standards Association (CSA) and Underwriters Laboratories of Canada (ULC) enforce strict safety and testing standards for all publicly accessible chargers, including thermal management, impact resistance, and climate suitability. Both provincial and federal funding programs require compliance with the Canadian Electrical Code (CEC), ensuring that all charging installations meet safety standards critical for fleet dependability.

British Columbia and Canada's federal government offer a comprehensive support network for EV fleet operators, from financial incentives and regulatory guidance to infrastructure development and technical assistance. Through programs like CleanBC Go Electric, iZEV, and ZEVIP, both levels of government encourage fleet operators to make the transition to electric, ensuring compliance with emission targets and providing the necessary resources to succeed in a low-carbon future.

## References

Government of British Columbia. (2023). CleanBC Go Electric Fleets Program. Retrieved from BC Government BC Hydro. (2023). Fleet Electrification Support Services. Retrieved from BC Hydro Natural Resources Canada. (2023). Zero-Emission Vehicle Infrastructure Program (ZEVIP). Retrieved from Natural Resources Canada Government of Canada. (2022). 2035 Zero-Emission Vehicle Mandate. Retrieved from Canada.ca







