

Proposal:**Building Code Requirement for Electric Vehicles****Submission To:**

Rachel Anne Notley, Premier of Alberta
Sara Marjorie Hoffman, Deputy Premier, Minister of Health
Brian Mason, Minister of Transportation / Minister of Infrastructure
David Manson Eggen, Minister of Education
Deron Bilous, Minister of Economic Development and Trade
Joseph Anthony Ceci, President of Treasury Board and Minister of Finance
Danielle Marie Larivee, Minister of Municipal Affairs
Margaret Ellen McCuaig-Boyd, Minister of Energy
Christina Gray, Minister of Labour
Marlin Robert Schmidt, Minister of Advanced Education
Brandy Lynn Payne, Associate Minister of Health
David Wheeler, Chair of Alberta Energy Efficiency Panel

Situation:

Many homes in Alberta, including those of rental suites and multifamily structures, are not equipped for electric vehicles owners to charge their vehicles. The lack of available electrical outlets for charging in the home environment creates an obstacle for electric vehicle adoption. Retrofitting to accommodate EV chargers is more expensive than building them in at the time of construction. This cost is even higher in Multi-Urban Residential Buildings (MURBS) where EVs offer some of the biggest gains.

Problem:

Many homes in Alberta including those of rental suites and multifamily structures are not equipped for electric vehicles owners to charge their vehicles. The lack of available electrical outlets for charging in the home environment creates an obstacle for electric vehicle adoption.

Key Analysis:

The majority of electric vehicles owners take advantage of the down time at home to charge their vehicles and also attempt to take advantage of charging in off peak hours at night, minimizing the demand on the infrastructure and attempting to cut power costs where applicable. Without the electrical connection to the electric vehicle at home, the majority of people are unable to transition from a combustion engine vehicle.

Recommendation:

As the expected requirement of EV chargers will rise, making changes to the building code to implement them at the time of building construction in accordance with the Alberta Electrical Code would offer the biggest impact for transitioning to electric vehicles long term, with the least amount of government expense, where the cost would be nominal and picked up by the consumer at purchase.

The Alberta Building Code should be modified to require that all residences have at least one suitable electrical outlet for each residence installed and wired in accordance to the Alberta Electrical Code for the purpose of electric vehicle charging in all new building construction.

Justification:

The implementation of these suggested changes will offer an increase the adoption of electric vehicle ownership.

EV Ownership and use will lower greenhouse gas emissions (by potentially 23% using 2015 statistics) and cut noise pollution which will reduce healthcare costs.

Infrastructure development will create jobs for skilled Alberta workers stimulating the economy.

The demand for skilled labour will stimulate post-secondary education within the province.

Potential Funding:

This initiative would be an implementation at code level so the cost of adoption would be low on the government side with only a small increase in cost of implementation carried by the consumer.

Reference:

Electric Vehicle Adoption Proposal In Alberta – Terms of Reference – Version C1.0