



PROMOTING ELECTRIC VEHICLE INFRASTRUCTURE

An entrepreneurial plan to support the building of
EV charging stations across Saskatchewan



PROMOTING ELECTRIC VEHICLE INFRASTRUCTURE



In the near future, Electric vehicles (EV) are set to overtake the sale of Internal Combustion Engine (ICE) vehicles. A 2019 analysis by Bloomberg New Energy Finance estimates this will take place by 2040.¹

This switch to EVs is not just beneficial to the environment through the reduction of Greenhouse gas emissions from personal vehicles, but also more cost effective. The cost to operate an EV comes out to roughly \$0.24/litre if converted to the equivalent cost of fuel for a comparative ICE.

While the transition is inevitable, the pace of adoption here on the Canadian prairies will greatly depend on the development of infrastructure for charging EVs. The Saskatchewan Liberal Party proposes a solution for this challenge that will also benefit small businesses and entrepreneurs in our province.

When charging an EV, it all comes down to time. Currently, there are three types of charging stations:

- **Level 1** uses a standard 120 volt electrical outlet. This is the least expensive and most readily available method, but is also the slowest – 8 to 20 hours depending on battery size.
- **Level 2** chargers require 240 volt power, and can cost around \$1000 extra when you buy your vehicle. The cost to install a Level 2 charging port is about \$5000. This method can still take at least several hours for a full charge, and can be completed overnight or within a typical work day.
- **Level 3** fast charging stations can fully charge an EV within 40 minutes to an hour. They require 480 volts of power and are the charging stations that look the most like a gas pump. These are also the type that are currently the least available in our province. The cost for these charging stations is about \$47,000 per station.

¹ Electric Vehicle Outlook 2019, <https://about.bnef.com/electric-vehicle-outlook/>

While most level 1 & 2 charging stations can be easily set up at home and will serve the needs of most EV owners the majority of the time, the lack of charging infrastructure away from home is the greatest roadblock to the wider spread of EVs.

According to the Saskatchewan Hotels and Hospitality Association (SHHA), there are 447 hotels and 786 restaurants in the province. Many of these small businesses and entrepreneurs are well positioned to take advantage of the upcoming EV wave. To this end, the Saskatchewan Liberal Party proposes that the provincial government offer a subsidy for the purchase and installation of up to ten Level 2 charging ports to any hotel, and up to two Level 3 charging stations to any restaurant located in a small community or rural area.

These subsidies would be achieved through a reduction in the business' provincial income taxes of up to 80% of the total cost of the charging station, spread out over three years. Restaurants in urban areas would not be eligible for the subsidy because of the availability of existing facilities such as gas stations that are already or likely to soon add charging stations.

The total cost of this program would be up to \$50 million dollars, including administration costs. The program may be spread out over multiple budget years, and adjusted based on demand.

The benefits of this program are as follows:

- It would lead to a boost in tourism, as EV owners would be able to drive across all parts of the province without worry of ending up stranded for an extended period of time due to a lack of charging infrastructure.
- Hotels that take advantage of this subsidy would be able to attract guests who could charge their vehicles during their stay.
- Restaurants would see a boost in sales from EV owners who would patronize their business while they wait for their vehicle to charge, and would also gain more revenue from the sale of the electricity used to charge that vehicle. (The current rate for using an EV Level 3 charging station is about \$17/hour.)
- It would greatly encourage many ICE vehicle owners to switch to EVs thus reducing the amount of greenhouse gases produced by vehicles in the province.
- As Saskatchewan citizens eventually turn more and more to renewable energy, it will further reduce our carbon footprint, as well as make the cost of owning a vehicle more affordable for all residents.