

Delegation to Committee of the Whole on Electric Vehicle Infrastructure from the EV Society - Northumberland Chapter, David Kuhnke, Chapter Lead

In reviewing the Electric Vehicle (EV) Charging Network proposed for the Town of Cobourg, I believe it to be a very good start in supporting the Cobourg's Declaration of Climate Change Emergency. The more EVs that are being driven into and around Cobourg, the fewer greenhouse gases (GHG) emissions there will be and the less general levels of air pollution. This will help contribute to the Town's goal of reducing our effect on climate change.

There are several corporations that are actively installing charging stations (Level 3 Fast Charge DC units) at strategic locations along the major highways. Examples include PetroCanada (Nanaimo to Halifax, including Burnham & 401), ONRoute (23 locations in Ontario), OPG/Hydro One Ivy Network in northern Ontario, Electrify Canada (across Canada). Of course, Tesla installed their proprietary Superchargers across North America to service Tesla owners, including at the 401 and Cty. Rd. 28 intersection (Pt. Hope). These highway locations are targeted for travelers that want to recharge their EVs during longer trips. They are not intended or expected to be used at final locations, such as towns and destinations (eg. Cobourg Waterfront Festival, St. Jacobs Farmers & Antique Market).

The three (3) locations selected by LUSI and Cobourg are well chosen in terms of availability and use by both visitors and residents.

The CCC (Community Centre) location is close to a power source (panel), but not that convenient for users. I recommend that two more chargers be installed at the north end of the Centre. This location is heavily used by visitors, especially from out of town when Cobourg hosts the numerous sporting events throughout the year (eg. hockey, soccer, volleyball, pickleball, etc.).

The Victoria Park/Marina location will also serve many visitors, especially from out of town, that come to enjoy the Beach, Victoria Park plus retail shops and nearby restaurants.

The Third Street/Albert St location is an excellent choice. Customers to the LCBO, Millstone bakery, Ganaraska credit union, plus the offices along the south side of the parking lot will all benefit from those charging stations. In the summer, visitors to the Cobourg Farmers' Market and in winter, visitors for the skating rink will also benefit.

As Chapter Lead for the Electric Vehicle Society of Canada – Northumberland Chapter, I issue a newsletter about twice a month to the 80+ EV enthusiasts in the Northumberland area. I also attend monthly meetings of the 15 chapters in Ontario and Canada Talks Electric Cars monthly webinars. These, and other media, will be used to promote the availability of the charging stations in Cobourg. If you or any of your staff are interested in learning more about electric vehicles, I would be happy to add you to our mailing list to receive our newsletter.

There is a question about collecting data regarding the use of these charger locations. This should be easily addressed by the Ivy Network load management system. Most EV remote vehicle apps (eg. FordPass App) provide owners with real-time notification of their vehicle's charging status and when they should disconnect it.

In the future, it would be prudent to consider installing at least one double head charger at every town parking lot. It is very unlikely that this infrastructure will sit unused for years. There are a number of smartphone apps that EV users make use when planning trips that show locations of chargers along

their route, similar to Google Maps. Examples include ABRP (A Better Route Planner), ChargeHub, ChargePoint, Electrify Canada, Flo, Ivy, PlugShare, etc. These new chargers in Cobourg would be added to these EV route applications for anyone driving their EV to Cobourg where they can charge their vehicle.

Regarding changes in technologies, the most likely change is regarding use of hydrogen for fuel cell technology. At this time, it is not expected for use in smaller vehicles for personal use, but more likely with long-distance applications such as passenger trains and highway transport trucks. This search of Electric Autonomy resulted in several good articles <https://electricautonomy.ca/tag/hydrogen/>.

Other factors to consider include the general increase in sales and adoption of EVs. This year, 2021, is considered by a number of automotive journalists as a tipping point for EVs worldwide. There are expected to be over 20 new models released this year, adding to the 40 already in circulation in Canada. Several manufacturers, such as Ford, GM, Stellantis (Peugeot, Fiat, Chrysler <https://en.wikipedia.org/wiki/Stellantis>) expect to stop manufacturing internal combustion (ICE) vehicles in the period 2030-2040). Other jurisdictions (eg. California, Quebec, BC) are planning to prohibit the sale of ICE vehicles in the same time period.

They all recognize that burning fossil fuels is one of the main contributors to climate change and time is running out. If the earth's average temperature continues to increase in the next 10-15 years, the effect on our climate will be irreversible.

One doesn't need to watch CBC's "the Nature of Things" or PBS's "Nova" to realize that our climate is getting out of hand. Just watch the evening news.

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[Electric Vehicle Society-Northumberland](#)

<https://www.youtube.com/c/ElectricVehicleSociety>

