

Quality Urban Energy Systems of Tomorrow

QUEST | NS

Electricity System Review Nova Scotia Department of Energy Joseph Howe Building 1690 Hollis Street, PO Box 2664 Halifax, NS B3J 3J9

March 18, 2015

Re: QUEST NS Submission

QUEST – Quality Urban Energy Systems of Tomorrow and the QUEST Nova Scotia Caucus recognize the opportunity to strategically use energy delivery systems, such as electricity and natural gas networks, for transportation purposes to help establish a Smart Energy Community.

A Smart Energy Community is all about improving energy efficiency, cutting costs, enhancing reliability and reducing greenhouse gas emissions.

For Nova Scotia, the transportation sector represents a quarter of all energy used and nearly the same amount in terms of greenhouse gas (GHGs) emissions. With the advancement towards a cleaner electricity distribution network for Nova Scotia, drawing on the electricity grid as a fuel source for transportation would support the use of electric vehicles (EVs) and could contribute to reducing GHGs associated with transportation, as well as become a solution to better manage the establishment of intermittent renewable electricity across the province.

Although Nova Scotia has 42 EV charging stations, it remains behind provinces such as Québec (approximately 475+ stations), Ontario (approximately 400+ stations), and British Columbia (approximately 450+ stations). By increasing the number of charging stations and the ease of accessing them, the province would be supporting both the establishment and market for EVs, and addressing known market barriers.

For instance, it is recognized that without having sufficient EV infrastructure in place, there is consumer and retailer reluctance to invest in EVs or to rely on them as a reasonable alternative mode of transportation. Also, many, but not all, public EV charging stations are equipped with a software application that can be used to confirm whether an EV charging station is in use. Having to wait for a protracted period of

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Executive Director/ Directeur exécutif Brent Gilmour, MCIP RPP time at an EV charging station that is in use can reduce the viability and consumer preference for EVs.

The QUEST NS Caucus suggests that consideration be given to requiring all public charging stations be tied into an interconnecting application.

Another acknowledged market limitation for Nova Scotia is having only one DC fast charging station in operation, with another slated for installation in May of 2015. This makes rapid charging for long haul commuters or tourists using EVs a virtual impossibility.

The QUEST NS Caucus supports Electric Mobility Canada's submission that addresses this barrier by giving consideration to the completion of fast charging stations at strategic provincial highway locations.

There are two additional ways that the province could further demonstrate leadership for the uptake and support of EVs.

First, with the adoption of the Leadership in Energy and Environmental Design (LEED) as a common guideline to follow for the development of provincial schools and other provincial buildings, the province of Nova Scotia could adopt a policy to include at least one EV charging station in all new provincial infrastructure. This would support the earning of a low cost LEED point, as well as support similar public institution initiatives, such as the inclusion of an EV charging station at CP Allen High School.

Second, with the establishment of *The <u>Canadian EV Infrastructure</u> <u>Deployment Guidelines report in 2014</u>, which serves as a resource to aid in the proper deployment of EV charge infrastructure, the province of Nova Scotia could develop a "made in Nova Scotia" version of the guideline. The guideline would serve to support a standardized approach for the creation of EV charging stations across the province.*

Yours Truly,

Mary Ellen Donovan Co-Chair QUEST Nova Scotia

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CC: Nova Scotia Caucus Participants