

### June 26, 2020

## Submission to Select Standing Committee on Finance and Government Services: Budget 2021 Consultation

Via https://consultations.leg.bc.ca/Submission/Create?cons=Budget2021

### **Executive Summary:**

The Vancouver Electric Vehicle Association is pleased to present this submission in support of the Budget 2021 consultation process. We further confirm our interest in follow up discussion and offer our collaboration to pursue opportunities identified below.

Continued funding support for EV adoption initiatives is essential, even when competition for such resources presents budgetary challenges. We encourage a balanced approach emphasising a targeted mix of policy development and regulatory innovation.

We urge the Government to adopt an integrated suite of initiatives outlined in this submission:

- Policies and regulatory changes that facilitate BC electrical utilities taking a leadership role in enabling renewable energy options that are open to a broad range of participants in the provincial economy.
- ii. Innovative strategies to target EV charging infrastructure deployment in MURB settings to enable EV adoption by people regardless of their rental or ownership status.
- iii. Targeted development of universal design principles for EV charging infrastructure to accommodate the needs of all people, including persons with disabilities. We note that BC Hydro has already taken the initiative to reach out to the EV community and to collaborate with VEVA members in this area.
- iv. Promotion of strategies in support of solar PV, such as through integrating solar ready measures into the BC Energy Step Code.
- v. Provincial level regulations supportive of EV charging ready requirements for new construction, including potential integration of this requirement into the BC Energy Step Code.
- vi. Support for electric drive commuter rail projects that are not dependent on fossil fuel sources and that meet the criteria of environmental sustainability and best value in terms of technology options and energy efficiency.
- vii. Enhancements to the Scrap-It program to update and provide a level playing field for all prospective participants.
- viii. Measures to target the hospitality industry with respect to EV charging infrastructure.
- ix. Measures to promote the electrification of fleets, in particular, heavy duty vehicles.

Each of these measures is discussed in detail below.



# Continued adoption of EVs and electrifying our economy is essential for a healthy future

BC leads Canada in the adoption of electric cars. The BC Government has demonstrated leadership in providing vehicle incentives and charging infrastructure to enable a strong base of electric car ownership from which to grow to meet ZEV Mandates and accelerate adoption rates. We still have a long way to go for trucks, buses, trains and other vehicles. Continued progress requires ongoing support on all fronts.

The current unique policy environment presents a once in a generation opportunity for the Government of BC to refocus on critical issues that matter to British Columbians, including climate action, the green economy, social justice, equitable access to essential health care, and inclusive participation in the work force for under-represented groups. The Province will need to take a bold stance to engage fully with this new social, economic and cultural reality.

Electric vehicles and full electrification of our economy will increase productivity, enable us to be self-reliant and resilient no matter what the future brings. Electric vehicles, electric public transportation, and electric micro-grids will enable BC to manage costs and ensure that all citizens can prosper in a sustainable, inclusive 21st Century.

### Electric vehicles, electrification and renewable sources of energy

The role of electrification and renewable sources of energy are critical factors in residential, commercial and industrial applications for Indigenous, rural and remote communities as well as more dense population centres. The Province's plans for electrification are covered in Clean BC and several other policy documents. Despite the reference in Budget 2021 Consultation to Clean BC as "...a central pillar of B.C.'s Restart Plan and our path to a more resilient economy", the current budget target for Clean BC is only \$1.3 billion over 4 years. This is too modest to accomplish what needs to be done.

We strongly support raising this budget target to ensure Clean BC has the resources to be an effective central pillar in the Restart Plan, and aggressively funding programs to help drive innovation and leadership in this area.

As a starting point we urge you to compare BC's centralized electric grid infrastructure to more innovative progressive designs around the world that have already integrated solar and wind and are actively integrating battery firming strategies. Australia and Germany provide just two successful examples. In BC, the central grid must be expanded, distributed and enhanced in order to enable the full electrification and decarbonization of our economy – at the same time, reducing the precarity of a centralized grid infrastructure.

Specifically, with respect to electric vehicles and zero emission electrification policies, our detailed recommendations listed below include a range of shovel-ready projects that will catalyze future growth. Our chief interest is to diversify the existing hydro grid to support greater electrification of BC's vehicle fleet. These actions have the parallel benefit of delivering energy to offset dependence on fossil fuels in diverse settings province-wide.



An overarching long-term strategy to build this electric vehicle-rich and resilient electrified economy will depend on major policy changes in the direction, oversight and regulation of BC utilities. We believe de-centralization of utility operations that accommodates localized micro-grids, energy storage systems and non-hydro renewable energy generation is critical to mitigate future electricity costs for consumers and businesses and to match variable demand/supply. New electricity generation going forward should capitalize on less expensive, non-hydro renewable sources firmed up by BC's existing hydro dam capacity. Non-hydro, renewable energy sources should include residential and commercial rooftop solar, utility scale solar and wind turbine generation as mainstream technologies.

Current strategies for a resilient economy include lowering barriers to EV adoption, encouraging localized electrical energy generation and storage within residences and businesses, and building electrified transportation networks. Related technologies include battery banks, stored electrolyzed hydrogen and demand side management systems and more integration between EV charging and load sharing. To optimize the benefits of these changes, we recommend the following initiatives:

- Continued support for Accessible EV Charging to retrofit legacy MURB buildings that do not have EV charging today. Retrofitting these buildings would support up to 40% of BC's population who are discouraged to purchase EVs due to the lack of charging infrastructure. Accessible charging includes universal design that enables persons with disabilities to use this infrastructure without difficulty.
- 2. Support **residential and commercial solar PV** through policies such as:
  - a. Revamp net-metering policy to enable surplus generation payments back to the generator.
  - b. Eliminate PV system size cap of 100KW
  - c. Enable virtual net metering for residential and all user classes
  - d. Fund or finance solar projects for schools, hospitals and government buildings
- 3. Provide **electric heat pump** incentives to replace fossil fuel heating and inefficient legacy electric baseboard installations.
- 4. Support development of electrified commuter rail infrastructure, including:
  - a. South Fraser Community Rail project, is a high impact, low cost project that would provide a significant commuter rail backbone for a region with high traffic congestion. This project would signal a significant change to the current practice of continued highway expansion and serve as an economic development catalyst for the South Fraser region.



- b. Similar opportunities for electric train technology include:
  - i. Re-starting the E&N Railway between Esquimalt and Courtenay BC
  - ii. Replacing diesel equipment on the Westcoast Express
  - iii. North Vancouver to Whistler commuter rail along the CN right of way
- 5. Continued financial support and policy changes for EV adoption
  - a. Zero Emissions Vehicle Mandate. Advance from 2040 to 2030. End the purchase of new diesel or gasoline-powered vehicles by January 1, 2030, in company with Ireland, Netherlands and India. Require automakers to meet an escalating annual percentage of new light-duty ZEV sales, reaching 50% in 2025 and 100% in 2030.
  - b. Enhancements to the Scrap-it program. This oversubscribed program needs review and restructuring both with respect to funding and allocation of incentives:
    - Revenues: consideration should be given to increase carbon credits paid by the fossil fuel industry on a per unit extracted basis and on an expanded base.
    - ii. Application of credits to electric vehicle purchases: Car dealers who are not members of the New Car Dealers Association are excluded from this program. The application of credits should apply to all EV sales, used or new.
- 6. Hospitality Sector EV Charger Funding.

As a direct stimulus to the hospitality sector, invest in charging infrastructure for hotels, bed and breakfasts and convention centres. This will have the combined effect of advancing the tourism and event hosting sector by promoting **EV tourism** as well as supporting BEV and CEV adoption in the province generally. In addition to stay at home vacations for BC residents, include a marketing plan to neighbouring US States and Canadian Provinces to attract EV drivers to our province (launched when it is deemed safe to do so given current pandemic conditions).

7. Electrification of Heavy-Duty Vehicle Fleets. Heavy duty vehicles represent 1/10 the total vehicles in the province yet contribute up to 50% of GHG and air pollution from the transportation sector. The health burden of particulate matter emitted by diesel engines is well known and is an unnecessary contributor to morbidity rates and health care costs in the province.

To enable economic and faster transition of the medium- to heavy-duty fleets through EV conversions of legacy Class 3 to Class 8 vehicles, we recommend the Province make the following changes to the current SUVI (Specialty Use Vehicle Incentive):

 a. Provide incentives for conversion or repowering of Class 3 to Class 8 legacy internal combustion vehicles to electric drive for businesses in BC. This includes trucks, school and passenger buses.



b. Provide incentives for adoption of new electrification technologies specific to commercial fleet Class 3 to Class 8 vehicles.

We thank the Government of British Columbia for this consultation opportunity at a pivotal time when your choices will shape our province's future prosperity, equity and sustainability for generations to come. We would be pleased to provide further information to the Select Standing Committee at your request.

Respectfully submitted

Vancouver Electric Vehicle Association

[ original signed by ]

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#### About the Vancouver Electric Vehicle Association

VEVA is a not for profit, volunteer organization, founded in 1988. Since that time, we have advocated for a transformation from internal combustion to zero emission electric vehicles. We are now the largest and most influential electric vehicle association in Western Canada. Membership is available to all, and today we have more than 400 members across BC. We work closely with other EV associations and clubs within the province and across Canada. Our annual *ElectraFest!* festival has been a popular public showcase for electric mobility technology continuously each summer since 1995. This year, Electrafest20 was cancelled due to the pandemic, but the festival is scheduled to return in 2021.

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