

Electric Mobility in Saanich

Summary of Public and Stakeholder Engagement
2018-2019



Introduction

There has been considerable public and stakeholder engagement in the past two years concerning electric mobility (electric vehicles and electric bicycles) in Saanich and the Greater Victoria region. These engagement activities have provided valuable information concerning the support of Saanich residents for electric vehicles (EVs) and electric bicycles (e-bikes) and for climate action more generally, as well as the barriers and challenges to making the transition to EVs and e-bikes.

This document provides a summary of these engagement activities and their key findings, which will inform development of Saanich's Electric Mobility Strategy.

Engagement Activities

Recent public and stakeholder engagement concerning electric vehicles and e-bikes in Saanich and the Greater Victoria region includes:

- Engagement concerning electric vehicles conducted in June-July 2018 as part of the Capital Region EV and E-Bike Infrastructure Planning Project;
- Plugging the Gaps Event: A Conversation about EV charging for people who live in condos and apartment buildings, held in September 2018;
- Engagement with the development industry and other stakeholders as part of developing EV charging infrastructure requirements for new developments in Saanich; and
- Three phases of engagement conducted between May 2018 and September 2019 for development of Saanich's Climate Plan.

Summaries of each of these activities and the findings they generated are provided below.

Capital Region EV and E-Bike Infrastructure Planning Project

Engagement for the Capital Region EV and E-Bike Infrastructure Planning Project included a public survey, a development industry survey, and a development industry workshop.

Public survey

The online public survey was focused on perceived barriers and opportunities around EV and e-bike ownership as well identifying how EV charging opportunities could be best facilitated in the Capital Region. The survey contained 24 questions and was open from June 12, 2018 to July 8, 2018. While survey participation was voluntary and not statistically valid, it does offer important insights.

- There were 592 completed surveys and 110 partially completed surveys.
- Survey responses were received from all parts of the Capital Region along with the Southern Gulf Islands, Salt Spring Island and Juan de Fuca Electoral Areas. Those living in the District of Saanich, City of Victoria, and District of Sooke represented the highest number of survey respondents at 28%, 26%, and 8%, respectively.

Key findings from the public survey:¹

Electric vehicles

- For those who own an EV or are considering one in the future, the vast majority of respondents selected “reduce personal impact on the environment” as the top reason for doing so. This represented 78% of the responses, followed by “realize financial savings” (60%), and “battery range has improved” (56%).
- The top three barriers to EV ownership selected by survey respondents include: [1] EVs are too expensive, [2] there are not enough public chargers available, and [3] don’t have the ability to charge at home.
- For those living in a multi-family building, the largest barrier to EV ownership is “don’t have the ability to charge at home” (27% of responses). This was higher than all of the other household types including single detached home, where only 8% selected “don’t have the ability to charge at home”.
- Challenges identified by current EV owners included range anxiety, lack of public charging stations, and lack of an ability to charge at home.
- Almost 70% of survey respondents indicated that having access to an at-home charger is “very important” with regard to owning or deciding to purchase an EV, while only 33% felt that access to charging at work is very important.
- Just over half of respondents indicated that having access to a public charging station network is very important to owning or deciding to purchase an EV.

E-bikes

- Overall, 16% of respondents own an E-Bike and 22% are planning to purchase an E-Bike in the next two to three years.
- Respondents are generally familiar with E-Bikes – 54% have seen them on the streets; 35% have spoken to an owner of one; and 30% have done research or looked for information about an E-Bike.
- Price is the top barrier to E-Bike ownership, followed by “afraid it might be stolen”, and “concerned about safety”. Other barriers such as “lack of places to park an E-Bike” and “concerned about less exercise” were also selected. About 20% of respondents selected “lack of public places to charge an E-Bike” as a barrier.
- About a third of respondents indicated that they would feel comfortable parking their E-Bike in a publicly accessible location, while another third indicated that they would not feel comfortable, and a final third were not sure.
- In response to the question “what would make you feel comfortable parking your E-Bike in a publicly accessible location”; common responses included:
 - Locked or supervised area
 - A secure designated E-Bike parking facility
 - Surveillance cameras
 - A paid parking facility for E-Bikers users

¹ Findings are excerpted from Watt Consulting Group, 2018. “Capital Region Local Government Electric Vehicle (EV) + Electric Bike (E-Bike) Infrastructure Backgrounder”. Prepared for Capital Regional District.

Industry survey and workshop

The intent of the industry survey and workshop was to understand existing developer uptake in EV charging infrastructure in new buildings, collect feedback on the barriers facing developers to make their buildings EV-ready, and to gather feedback and level of support for municipal policies and actions that could be adopted to advance EV charging infrastructure in new development. The workshop was also designed to provide information on market trends and emerging technologies that can make EV-ready development more cost-effective to install.

Industry Survey

The survey was open from June 20, 2018 to July 26, 2018 and had 13 questions. There were 41 completed submissions and 22 partially completed ones.

Key findings from the survey:

- Many developers have experience with installing EV stations or related infrastructure, with 60% having installed an EV charging station in a recent development, and 63% having installed conduit and wiring for either Level 1 or Level 2 charging in a recent development
- The most common barrier to installing EV charging stations in new development was cost, cited by 44% of respondents, followed by a lack of demand, cited by 30% of respondents
- Although lack of demand was one of the top barriers cited by developers, 50% indicated that they expected a moderate to high demand in the next 5+ years, and 76% expected a moderate to high demand in the next 10+ years
- 68% of survey respondents supported (27%) or strongly supported (41%) EV-ready regulations in the Capital Region. Of the 19% that opposed such regulation, the most common concerns were:
 - increased costs to developers, leading to increased housing costs;
 - a belief that the market should decide, based on consumer demand; and
 - general opposition to governments regulating this area.
- When asked how local governments can support EV charging infrastructure in new developments, the following actions were prioritized:
 - Development incentives (e.g. density bonuses, parking relaxations): 74%
 - Financing incentives (e.g. tax incentives): 69%
 - Expedited permitting: 54%
 - Clear, consistent regulations: 46%
 - Education on emerging technology: 44%

Industry Workshop

A presentation and workshop session focused on electric vehicles was hosted at the Urban Development Institute Capital Region's breakfast session on July 19, 2018.

Summary of responses and discussion at workshop:²

- Issues around metering, equitable distribution of costs, and challenges with stratas assigning cost were raised as key issues. Consideration also needs to be given to differentiating rates for short- and long-term parking (i.e., customer vs employee).
- Concern was expressed over investment in charging infrastructure that may be obsolete (or “old technology”) in future, and committing to a specific charging technology or supplier that may not exist in future.
- Further testing and confidence with load management systems was identified as being important in easing uncertainty over building electrical requirements.
- A level of urgency with charge station installation was expressed as the region is in a period of growth and delaying installing charging infrastructure will result in more buildings requiring retrofit at a later date (and at higher cost).
- It was suggested that financial or development process incentives would encourage inclusion of charging infrastructure in new development. Some participants cautioned that added regulation results in additional development cost and time.
- Certain participants indicated that EV chargers are a marketable feature that they use to attract buyers / leases and suggested that others should do the same.
- The group indicated support for this initiative and the guidance / certainty it will provide on concerns such as development cost implications, technology options, and infrastructure suppliers.
- Widespread use of electric vehicles will not address issues of single-occupant vehicle use and suburban “sprawl”-type land development.
- The group reiterated the value of the session and the timeliness of this information being presented as land developers consider installing EV chargers and municipalities look to enact bylaws to require them.
- A desire was expressed for the Urban Development Institute to establish a working group to guide work on this from the development industry.
- A desire was also expressed for a reference guide for the detailed installation of charging stations to streamline electrical design work.

Plugging the Gaps Event: A Conversation about EV Charging for People who live in Condos and Apartment Buildings

In September, 2018, Saanich partnered with Drive Electric Victoria during their annual Ride and Drive event, as well as the CRD and the City of Victoria to host a workshop for residents of condos and apartment buildings who are interested in purchasing an EV. The intent was to facilitate conversation aimed at removing barriers and helping increase charging access in the places where EV owners or would-be owners live and work.

² Excerpted from Watt Consulting Group, 2018. “Capital Region Local Government Electric Vehicle (EV) + Electric Bike (E-Bike) Infrastructure Backgrounder”. Prepared for Capital Regional District.

Intended outcomes of the dialogue were to:

- increase participant understanding of EVs and charging technology and available resources to undertake retrofits in their buildings
- inform the CRD, Saanich, and Victoria EV Strategies by gaining a better understanding of current barriers, as well as emerging ideas that can contribute to EV charging solutions in existing buildings
- help participants build relationships with others that are undertaking similar processes in their buildings

There were 24 participants at the event, which began with presentations from Saanich and PlugIn BC on the EV charger installation process, potential challenges and solutions, and available grants and resources. Participants were then able to choose a discussion group to join based on their specific interests and challenges. The discussion groups were supported by subject matter experts from PlugIn BC, the Vancouver Island Strata Owners Association, Technical Safety BC, and the EV Club. The discussion enabled participants to delve deeply into the challenges they were facing, and explore possible solutions based on the expert knowledge and their peer's experiences.

Key findings include:

- Electrical engineers and electricians are quickly getting up to speed on EV charging, and in the future there may be a certification program developed to support training and accreditation
- Many retrofits are installing one-off chargers with dedicated circuits, often in visitor stalls.
 - The use of visitor stalls for EV charging by residents may contravene the parking requirements of the building, as per the zoning bylaw
 - Installing dedicated circuits may cause early adopters to use up the building's spare electrical capacity, with costly electrical upgrades required to support later installations. To ensure equitable and affordable access, retrofits should be designed for load management that would enable residents in all units to have access.
- The retrofit process is lengthy, costly, and challenging to get through strata board approval, with limitations on where the required studies and upgrades can be funded from. A three-quarters vote is required to amend bylaws, approve funding for the project, and enact a "change of use" of common property.
- In addition, multi-family buildings need to grapple with issues such as who should pay for and own the charger, how to track and recover electricity costs in shared parking areas, how to choose station models if the units are networked and must be the same, and other liability and legal questions.
- Many participants were daunted by the process or were not finding the level of support needed by non-EV users in the building to move the initiative forward
- At the time of the workshop, there had been no rental apartment buildings that had accessed and installed EV charging stations through the Province of BC's Charging Solutions and Incentives program, administered by PlugIn BC, highlighting the added barriers and access issues for renters.

Engagement on EV charging infrastructure requirements for new developments

Engagement for developing EV charging infrastructure requirements for new developments in Saanich was conducted in two phases. Phase 2 included a workshop with developers as well as a stakeholder survey.³ These activities were intended to gather information on developers' and stakeholders' experience with EV infrastructure and perceptions of EV demand in the marketplace as well as their feedback on proposed EV charging infrastructure requirements.

Industry Workshop

A breakfast workshop for the developer community was offered on April 30, 2019 in partnership with the Urban Development Institute (UDI). There were 43 attendees, primarily developers, social housing providers, architects, designers, and local government staff.

Key findings included:

- Considerable experience with installing EV chargers and/or roughing in wiring in recent developments, but relatively little familiarity or experience with EV Energy Management Systems (but see lots of benefits).
- EV infrastructure is seen as a selling feature, an asset for the next buyer.
- Regulation needed, as even those that are putting in EV infrastructure now are not installing enough.
- Participants expected a large increase in demand in 5-10 years
- General agreement with 100% EV-ready parking stalls in new developments, using energy management systems to reduce costs.
- Some participants felt that affordable housing should be exempt or get variances from the 100% requirement, and that the capital costs would be too high and increase rents. Conversely, some participants felt it would exacerbate inequities if affordable housing did not provide charging – because costs will be much higher to retrofit in the future. Many participants felt that incentives should be provided for social housing.
- Concerns about cost.
- Reducing overall parking requirements would help new developments achieve the EV requirement.
- May be challenges for stratas and how they manage the infrastructure.
- Would like to see consistency across the CRD.
- Many participants felt that a proposed requirement that 5% of non-residential stalls be EV-ready was a low requirement and should be higher, or paired with incentives to achieve higher levels.

³ Phase 1 engagement included the engagement for the Capital Region EV and E-Bike Infrastructure Planning Project and the Plugging the Gaps Event discussed above as well as Phase 1 engagement for the Saanich Climate Plan, which is discussed in the next section.

Stakeholder Survey

An online survey was made available to the development industry, as well as shared with a broader set of stakeholders including local EV clubs, environmental non-profits, the Vancouver Island Strata Owners Association, and residents and organizations that had self-identified as interested in EV policy through Saanich's online e-newsletter.

The survey had 81 responses, 26% of which identified as being within the development industry. For those that worked within the development industry, there was an even spread between those constructing multi-unit residential, small scale residential, commercial, industrial and/or institutional (ICI), and mixed use developments.

The survey questions followed the same format as the industry workshop. The survey was meant to complement the in-person engagement for those who were not able to attend, as well as broaden the type of stakeholders engaged. A large majority of respondents (79-88%) agreed with the proposed requirements for EV charging infrastructure in new buildings in Saanich.

Saanich Climate Plan

Three rounds of engagement were held during the development of Saanich's Climate Plan. While this engagement was not specifically focused on electric mobility, electric vehicles and e-bikes were often raised and Sustainable Mobility is a focus area of the Climate Plan.

Summaries of each of the phases are provided below, with a focus on findings related to electric mobility. Full summary reports for each phase are available on the Saanich website: <https://www.saanich.ca/EN/main/community/sustainable-saanich/climate-change-energy/climate-plan-events-videos.html>

PHASE 1

Intent and timing: Broad input on key themes, issues and opportunities (late spring, summer and fall of 2018)

Methods of engagement: talk series, website, survey, festivals and public events, recreation centre and facility displays, newsletters, media and advertising, engaging on transit, one-on-one meetings and presentations, email and phone calls, open houses and workshops, and working group meetings.

Reach: Over 1,700 individuals engaged at events

Key findings

Broad consensus among most residents:

- Strong support for climate action
- Sense of urgency
- Desire for regulation and incentives as top municipal approaches

Feedback related to Sustainable Mobility:

- Support for complete, compact communities: (increasing density, mixed services and housing types)
- Need for improvements in public and active transportation (more frequent, convenient, affordable bus service, safe, attractive, accessible walking and cycling routes)
- Help with upfront costs and access to charging for electric vehicles

PHASE 2

Intent and timing: Feedback for draft strategies and actions (winter, spring and early summer 2019)

Methods of engagement: working group meetings, workshops, survey, open houses and presentations, festivals, community events, newsletter, email and phone calls, one-on-one meetings, website and social media interactions.

Reach: over 1,000 individuals engaged at events

Key findings

- High level of agreement and support for proposed strategies and actions (79% of responses).
- Most popular actions related to active transportation, vehicle fleet, electric vehicle charging access, local food production, transit improvement, bike parking, agriculture, waste and high-performance buildings

PHASE 3

Intent and timing: Draft Climate Plan review (fall 2019)

Method of engagement: survey, presentations, pop up events, recreation centre and facility displays, website, newsletters, social media interactions, and emails and phone calls.

Reach: Over 200 individuals

Key findings:

- Strong support for climate action and the draft plan
- Sense of urgency for action
- Desire to see costs, timelines and anticipated impacts of each action and how they relate to the overall goals

Strong support for Sustainable Mobility strategies:

- Accelerate electric and renewable mobility – 77% agree
- Invest in active transportation – 90% agree
- Prioritize transit supportive policies & practices – 86% agree