

Electric Mobility Strategy

Summary of Public and Stakeholder Engagement

October 2020



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1.0 Introduction

This report provides a summary of public and stakeholder engagement for the development of Saanich’s Electric Mobility Strategy. Prior to the development of this strategy, there had been considerable public and stakeholder engagement related to electric vehicles (EV) and electric bikes (e-bikes) in Saanich and the Greater Victoria region, including:

- Three phases of engagement between May 2018 and September 2019 as part of updating Saanich’s Climate Plan;
- Engagement on EVs and e-bikes as part of the 2018 Capital Region EV and E-Bike Infrastructure Planning Project;
- September 2018 Plugging the Gaps Event: a conversation about EV charging for people who live in condos and apartment buildings; and
- Two phases of engagement with the development industry and other stakeholders as part of developing EV charging infrastructure requirements for new developments in Saanich, May 2018 – May 2019.

A summary of the abovementioned engagement is provided in a separate report entitled “Electric Mobility Engagement 2018-2019 Summary”. In light of this foundational public and stakeholder engagement, engagement for the Electric Mobility Strategy focused on gathering feedback on proposed actions to include in the strategy. The proposed actions were developed to reflect best practices, the experiences of leading jurisdictions, and analysis of relevant data as well as the feedback from previous public and stakeholder engagements.

This report provides a summary of engagement activities for development of the Electric Mobility Strategy followed by summaries of the feedback from members of the public and stakeholders, respectively. Details are provided in the appendices.

2.0 Overview of Strategy Development Process

The Electric Mobility Strategy was developed in a 6-phase process, as shown in Figure 1 below.

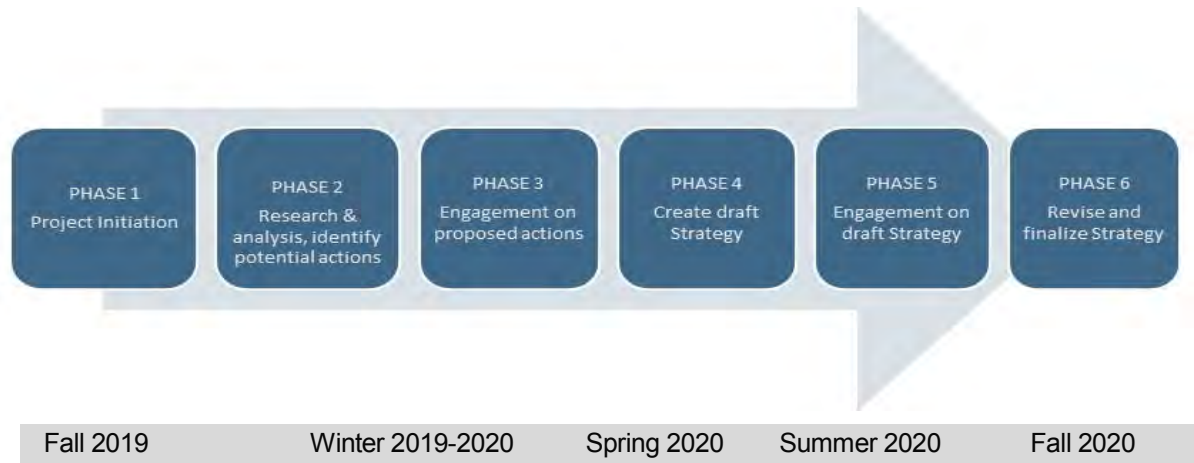


Figure 1: Process for Electric Mobility Strategy Development

- **Phase 1:** The scope of the strategy and process for strategy development were defined and an engagement strategy was developed.
- **Phase 2:** Saanich staff reviewed previous engagement findings, conducted research on best practices and the experiences of leading jurisdictions, and analyzed relevant data. This included a 2018 report on electric vehicle (EVs) + electric bike (e-bikes) in our region,¹ as well as numerous other reports. Through this research and analysis, staff identified actions that the District of Saanich might take to support electric mobility in Saanich.
- **Phase 3:** The public and stakeholders were invited to review and provide feedback on the proposed actions (Saanich Sustainable Mobility Survey)
- **Phase 4:** Public and stakeholder feedback was incorporated into a draft Electric Mobility Strategy.
- **Phase 5:** The public and stakeholders were invited to review and provide feedback on the draft Electric Mobility Strategy.
- **Phase 6:** The Electric Mobility Strategy was revised to address feedback and then finalized.

¹ WATT Consulting Group, 2018. "Capital Region Local Government Electric Vehicle (EV) + Electric Bike (E-Bike) Infrastructure Planning Guide." Prepared for Capital Regional District. November.

Table 1: Engagement Activities Summary Statistics

Internal engagement			
Departments engaged:			
<ul style="list-style-type: none"> • Community Planning • Current Planning • Transportation • Facilities Management • Fleet & Solid Waste Services 			
External engagement			
Survey 1 (Sustainable Mobility Survey, Feb 2020)		Survey 2 (Electric Mobility Survey, Sept 2020)	
Number of survey responses:		Number of survey responses:	
• Individuals	163	• Individuals	192
• Stakeholder organizations	8	• Stakeholder organizations	4
Number of stakeholder organizations contacted	66	Number of stakeholder organizations contacted	66
Number of email comments received	6	Number of email comments received	3
Presentations to Saanich Advisory Committees:			
<ul style="list-style-type: none"> • Active Transportation Advisory Committee • Environment & Natural Areas Advisory Committee • Planning, Economic Development & Transportation Advisory Committee 			
Methods used to advertise survey:			
<ul style="list-style-type: none"> • Posts on District social media accounts • Email to EV listerve • Posters at Saanich Recreation Centres • Emails to stakeholder organizations 			

3.0 Part 1 Engagement: Feedback on Proposed Actions

3.1 Internal engagement

Two rounds of engagement were held with District of Saanich staff from the following departments:

- Community Planning
- Current Planning
- Transportation
- Facilities Management
- Fleet & Solid Waste Services

Prior to public and stakeholder engagement, District staff had the opportunity to review and provide feedback on the background information on electric mobility and proposed actions that would be used for public and stakeholder engagement. Following public and stakeholder engagement, staff from the departments listed above had the opportunity to review and provide feedback on the draft Electric Mobility Strategy.

3.2 External engagement

Public and stakeholder engagement for development of the Electric Mobility Strategy was focused on an online survey² that was available from February 14 to March 8, 2020. The survey was designed to gather feedback on proposed actions in several focus areas including:

- Electric Vehicles
- E-bikes
- Home and Workplace Charging
- Public Charging Network
- Education and Outreach
- District Leadership

Survey respondents had the opportunity to indicate their level of agreement³ with each action as well as to provide comments. The survey was designed to gather feedback from members of the public as well as stakeholder organizations. Four backgrounders were also provided on the Saanich website:

- Why electric mobility? The benefits of electric vehicles and e-bikes
- The role of electric vehicles and e-bikes in a sustainable transportation system
- Electric mobility market conditions
- Barriers to electric mobility

Links to the backgrounders were provided at relevant places within the online survey.

² A Word version of the survey was provided to members of the public who preferred to not use the online survey.

³ Strongly agree, Agree, Neither agree nor disagree, Disagree, Strongly disagree

The survey was advertised via social media posts, posters in Saanich recreation centres, an email to Saanich’s EV listserve, and email messages to stakeholder organizations listed in Table 4 in Appendix C.

There were 163 individual respondents to the survey as well as 9 respondents representing stakeholder organizations. In addition, comments were provided via email by four individuals and three representatives of stakeholder organizations.

Saanich staff provided presentations on the Electric Mobility Strategy to three Saanich Advisory Committees:

- Environment & Natural Areas Advisory Committee on March 18, 2020
- Active Transportation Advisory Committee on March 26, 2020
- Planning, Economic Development & Transportation Advisory Committee on April 7, 2020

The feedback received from the public, stakeholder organizations and committees informed prioritization of actions as well as how the actions should be implemented. A summary of key findings is provided in Section 3.3 with detailed results provided in the appendices.

3.3 Key Findings

Public and stakeholder engagement revealed strong support for electric mobility, and for the proposed actions, with some exceptions, which are discussed below.

Members of the public

Support for proposed actions

Overall, the majority of survey respondents agreed with all of the proposed actions, and support was high for most actions. Fewer than 10% of respondents disagreed with most of the actions, with the exception of nine of the 39 actions, which between 10% and 19% of respondents disagreed with.

One action clearly had relatively low support: “Implement an employee loan program for personal e-bike purchases to be repaid on employee pay cheques (the employee would also pay the interest).” Just over half of survey respondents agreed with this action and almost 20% disagreed, with the rest neutral.

In addition to this action, only two other actions had support from less than 70% of survey respondents:

- Consider providing a financial incentive to help offset the cost of feasibility studies for installing EV charging infrastructure in multi-family residential buildings (68% of respondents agreed with this action)
- Develop a District e-bike fleet program (68% of respondents agreed with this action)

Table 2 in Appendix A lists the proposed actions in order from the greatest to the least agreement of survey respondents.

Themes

Many survey respondents provided comments that offered more insight on their level of agreement with particular actions, their support for electric mobility more generally, barriers to electric mobility they are experiencing, and/or priorities for action. Several themes emerged from the comments, which are discussed below.

Transit and active transportation

Many people noted the need to balance investments in electric mobility with investments in transit (including electrification of buses) and active transportation infrastructure. Some noted that while electric vehicles have lower carbon footprints than conventional internal combustion engine (ICE) vehicles, they have the same impacts in other dimensions such as traffic congestion and reduced road safety, and that the ultimate goal should be to reduce the amount of travel by car.

Equity

Several people noted that electric vehicles are relatively expensive, and suggested that action be taken to make them more affordable and to support purchase of used EVs. A few people felt that higher priced EVs should not be subsidized, nor should higher-income people or stratas.

Actions to support electric mobility should not penalize people who are not able to make the switch to EVs or e-bikes, and there is a risk that actions such as priority parking for electric vehicles could increase the resentment of owners of conventional vehicles and lead to an erosion of support for electric mobility.

A couple of people noted that greenhouse gas (GHG) emission requirements for ride-hailing vehicles might limit the ability of people who cannot afford to purchase EVs to work as ride-hailing drivers, while two others felt that ride-hailing itself should not be allowed in our region.

Bike safety

Many people noted that the biggest barrier to biking is the lack of safe bike routes, including in rural Saanich.

People noted the need for new infrastructure to accommodate e-bikes, including dedicated lanes/trails for pedestrians, pedal bikes, and e-bikes. Many people expressed concern about the impact of e-bikes on the safety of other active transportation users due to the higher speeds of e-bikes, and some noted that rules and regulations are needed for e-bikes.

E-bike incentives

Several people welcomed incentives for e-bikes; some people suggested that incentives for e-bikes should be extended to pedal bikes, or that pedal bikes should be encouraged over e-bikes.

Secure parking for e-bikes

Many people noted the need for secure parking for e-bikes, because of the prevalence of bike theft in Victoria and the higher price of e-bikes.

Other kinds of e-mobility

A few people suggested that strategies are needed to address other kinds of electric mobility, including electric scooters, electric wheelchairs, electric skateboards, and four-wheeled vehicles that travel at lower speeds than cars.

Charging needs in multi-family residential buildings

Several people highlighted the need for EV-charging in or near multi-family residential buildings. A few people noted the challenges with strata buildings and the difficulties they have faced when trying to get EV charging in their buildings. Others noted the need to provide support to co-ops and affordable housing developments for EV-charging infrastructure. A few people noted the need to ensure that new buildings have EV-charging infrastructure.

Need for more public charging

Many people noted that the District's public charging stations are often in use and not available and that there is a need to expand the network of public charging stations. One person suggested that this could be achieved through supporting Community Associations to include EV charging in each community.

One person suggested placing additional spaces beside EV-charging parking spots so that charging station users can plug in adjacent EVs once they are finished using the charging station.

Several people support imposition of user fees for District-owned public charging stations, although a few people thought they should remain free of charge or have very low fees. One person suggested that user fees should be based on electricity used, instead of time, because the last 20% of charging is trickle charging that takes longer.

A couple of people expressed a need for charging for e-bikes for long-distance travel; one person suggested that e-bike charging could be located close to a café and wifi.

Need for more fast charging

Several people expressed a need for more fast-charging stations, to support long-distance travel, accommodate anticipated future expansion of the number of EVs, and encourage

more people to switch to EVs. One person noted that increasing the number of chargers per location is more important than increasing the number of locations.

Parking

Several people cautioned against reducing the amount of parking available, for instance to accommodate e-bike parking, although one person felt that the District should not be providing free parking and that parking fees and parking tickets could provide funds to support a change to more sustainable transportation while discouraging personal vehicle use.

A few people felt that the District should not provide free parking for staff. One person suggested subsidizing staff use of transit and active transportation instead of providing free parking, while another suggested giving staff bikes and transit passes and reducing the municipal fleet.

Renewable energy to support electrification

A few people highlighted the opportunity to install solar and/or wind generation in Saanich to support charging of electric vehicles. One person thought that “it would be empowering for Saanich citizens to know that their vehicles and bikes are being charged by locally sourced renewable electricity.”

Support for District’s action to support electric mobility

Many survey respondents expressed their support and appreciation for the efforts of the District to support electric mobility, although a few felt that progress was not happening quickly enough.

A few respondents indicated that electric mobility should not be a priority for the District in light of other issues. One person thought that public money should not be used to subsidize electric mobility, while another stressed the importance of considering the long-term cost-effectiveness of public investments to avoid creation of “white elephants.”

Survey Respondent Information about the Use of EVs and E-bikes

The survey included optional questions about survey respondents, including whether they live in Saanich and if not, what community they live in; what kind of home they live in (single family or multi-family buildings); and whether they own or rent their home. There were also questions about EVs and e-bikes, including whether they had an EV or e-bike as well as questions related to EV charging and use of e-bikes. About 80% of survey respondents answered the questions pertaining to EVs and e-bikes.

EVs

The 82% of survey respondents who answered the question about whether they own an EV were equally divided between those who own an EV and those who do not. Of those who own an EV, 91% have access to charging at home and 12% have access to charging

at work. Most (86%) charge their EV at home and almost half (45%) use public charging stations, while only 9% charge at work.

E-bikes

Almost 80% of survey respondents answered the question about whether they currently own an e-bike or are planning to buy one within the next year. Less than half currently own an e-bike (23%) or are planning to buy one within the next year (21%).

A second question asked about how people use their e-bikes, or intend to use their e-bike once they buy it. Most people use their e-bikes for commuting to work (77%), running errands (73%), and recreation (70%). Only 37% use their e-bikes for taking their kids to and from school or activities. Interestingly, most people who are planning to buy an e-bike intend to use it for recreation (74%) or running errands (63%). Just over half (56%) intend to use their e-bike for commuting to work and only 4% intend to use their e-bike to take their kids to and from school or activities.

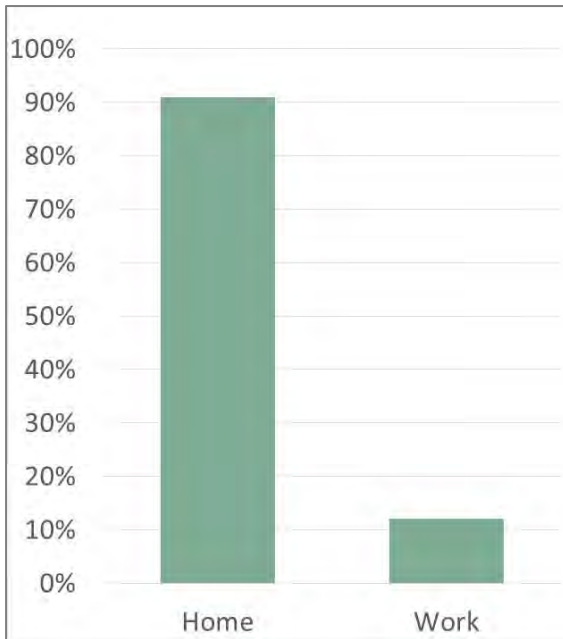


Figure 2: EV owners’ access to Charging – Survey 1 responses

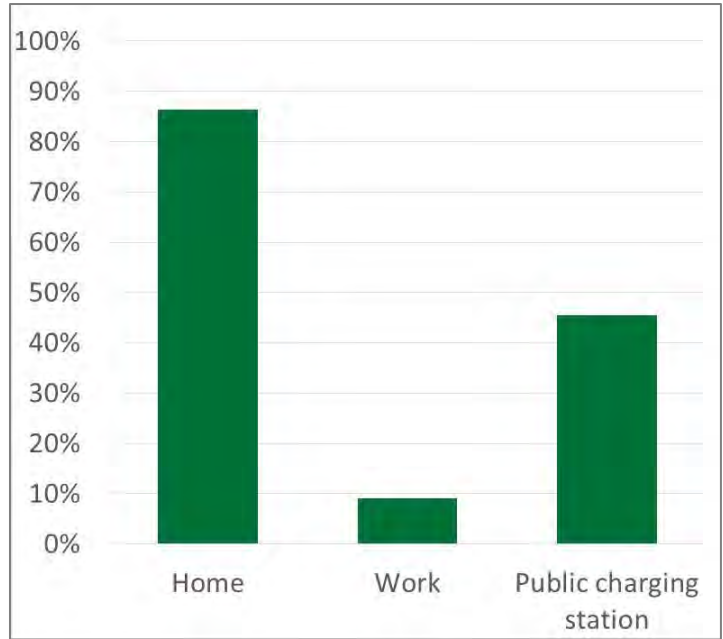


Figure 3: Where EV owners charge their cars – Survey 1 responses

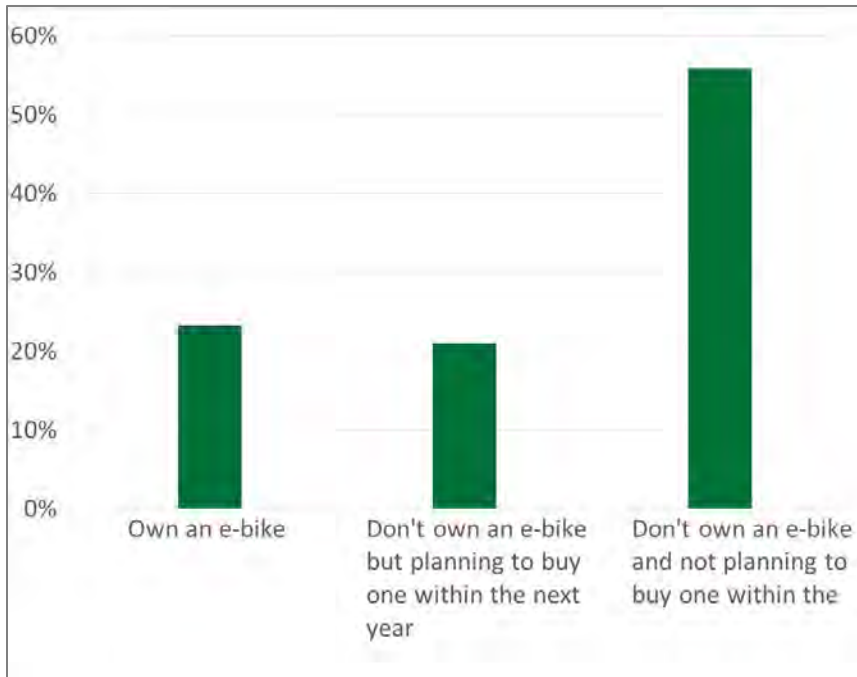


Figure 4: E-bike ownership – Survey 1 responses

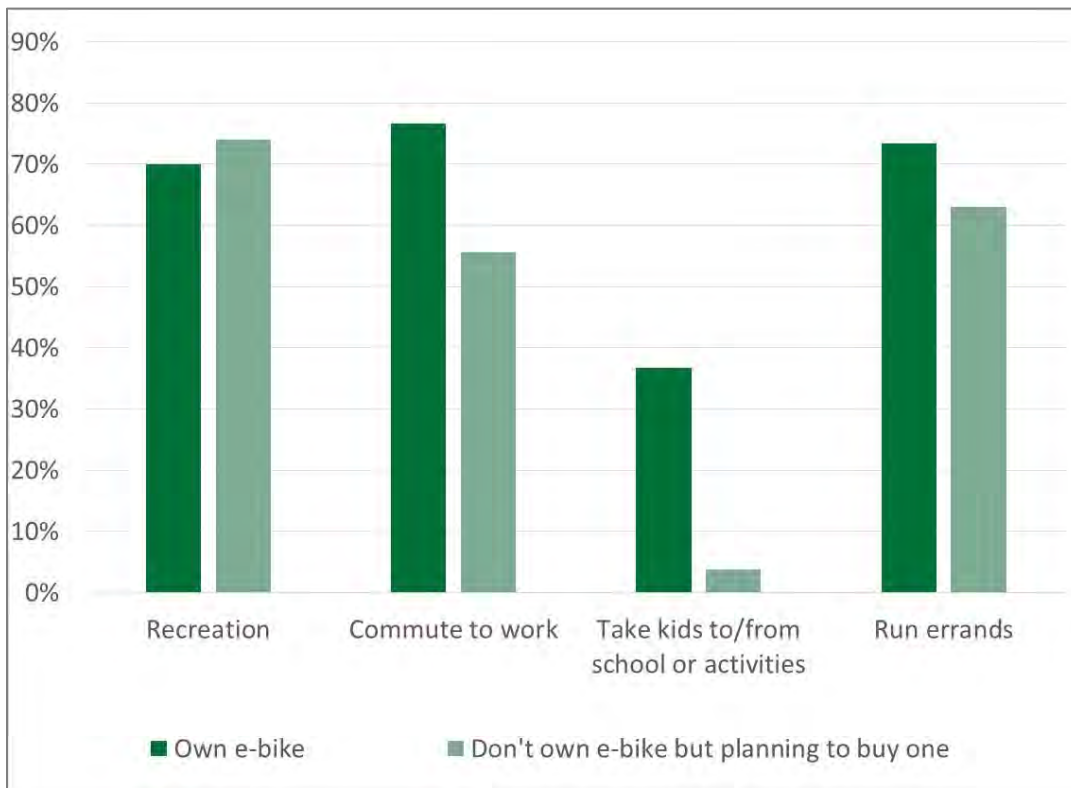


Figure 5: E-bike uses – Survey 1 responses

Stakeholders

Nine stakeholder organizations provided survey responses, including:

- Abstract Developments
- Creatively United for the Planet Society
- Greater Victoria Chamber of Commerce
- Hansbraun Investments Ltd.
- Motorize Electric Vehicles
- Vancouver Island Strata Owner's Association
- Victoria Airport Authority
- Victoria Electric Vehicle Association
- Victoria Residential Builders Association

Support for proposed actions

Support from stakeholder organizations for the proposed actions was generally high, with at least 75% of stakeholder respondents in agreement with most actions. The exceptions include:

- Work with stakeholders to explore the potential for EVs to act as a backup power supply during power outages (50% of stakeholder respondents agree)
- Advocate to the provincial government to enact Right to Charge legislation (57% of stakeholder respondents agree)
- Pilot an e-bike incentive program, ideally in collaboration with other municipalities in the Greater Victoria area (60% of stakeholder respondents agree)
- Develop a District e-bike fleet program (60% of stakeholder respondents agree)
- Advocate that electrification of ride hailing vehicles be a priority and included in Provincial regulation of these services (63% of stakeholder respondents agree)

Stakeholder comments

A few of the stakeholder respondents to the survey provided comments, which are summarized below.

Electric vehicle costs and incentives

Electric vehicles are expensive and compared to an affordable used vehicle are a large investment for a family earning median income in our region.

At the same time, operating and maintenance costs are lower for EVs. Low-income residents should be provided with assistance to help them make the switch to EVs and take advantage of lower operating costs.

Electric vehicle incentives should include sales tax waivers and provide up to 25% additional incentives for low-income people.

While priority parking for EVs is probably not needed, access to HOV lanes in rush-hour might be a good non-financial incentive.

Electrification of transit would provide environmental and economic benefits.

EV participation rates for ride-hailing should start at 50% or more and increase by at least 5% per year.

The technology is not yet available in North America to support backup power from EVs.

EV and e-bike charging in residential buildings

There is a need for EV charging near multi-unit residential buildings and “Right to Charge” legislation is essential.

The existing financial incentive program is generally not helping stratas in greater Victoria, and it would be good to have funding available for stratas that are keen to install charging but are not currently eligible for funding.

EV charging infrastructure requirements for new developments will increase the cost of residential buildings, impacting affordability.

The market for new residential housing is already providing e-bike and EV charging in response to demand, and the government should not be imposing regulation in what should be a market decision.

The Vancouver Island Strata Owners Association and Victoria Electric Vehicle Association welcome Saanich’s new EV-ready requirements for new developments.

New requirements for bike infrastructure will impose installation costs as well as ongoing costs for energy. Any regulations for charging should be restricted to conduits to accommodate future installation of charging infrastructure and should be deducted from development cost charges, as part of infrastructure contribution.

Public charging network

User fees for District-owned EV chargers should be based on electricity use and use (for Level 2 chargers) should be limited to 2 hours, with a fee charged per minute after that.

BC Hydro should waive demand fees at fast charging stations.

District action and priorities

Most stakeholder respondents that provided comments expressed support for the District’s actions to support electric mobility and address climate change.

However, one stakeholder noted that in light of multiple priorities, the District needs to focus on what is most important; actions such as densification can have a greater impact on mitigating climate change than electric mobility.

Another stakeholder felt that monitoring demand for EVs is not an effective use of staff resources in a climate emergency.

District corporate fleet

In addition to developing its own fleet strategy to reduce corporate emissions, Saanich could encourage other CRD municipalities to do the same.

Saanich could also draft a "Common Core EV Fleet Requirements" specification to encourage manufacturers to build for municipal and provincial fleets.

Saanich should buy used EVs for its corporate fleet as this would be more cost-effective.

4.0 Part 2 Engagement: Feedback on Draft Strategy

Feedback received from the public and stakeholders on the draft actions was used to refine the actions and additional actions were added in response to comments and suggestions received. This set of refined and additional actions was incorporated into a draft Electric Mobility Strategy.

4.1 Internal engagement

The draft Electric Mobility Strategy was reviewed by staff in several District of Saanich departments. The draft strategy was also reviewed by staff from the Capital Regional District and the City of Victoria, as several of the actions involve or affect these jurisdictions.

In addition, Saanich staff delivered presentations on the draft Electric Mobility Strategy to three Saanich Advisory Committees:

- Planning, Economic Development & Transportation Advisory Committee on 10 September, 2020
- Environment & Natural Areas Advisory Committee on 16 September, 2020
- Active Transportation Advisory Committee on 22 September, 2020

4.2 External engagement

After refinement to address staff feedback, the draft Electric Mobility Strategy was posted on the Saanich website and members of the public and stakeholders were invited to provide feedback on the draft strategy via an online survey (Saanich Draft Electric Mobility Strategy Survey) from September 8 – 27, 2020.

The second survey received 196 responses, four of which were on behalf of organizations, and the remainder of which were from individuals. Three written responses were also received, one of which was from a stakeholder organization. In addition to feedback on each individual action, survey questions were posed about the usefulness of background information, whether the strategy was easy to understand, and whether there were gaps in the strategy or background information presented.

The feedback received from members of the public and representatives of stakeholder organizations informed edits and additions to the background information presented, as well as some changes to the actions and/or prioritization of actions.

4.3 Key Findings

There continued to be a high level of support for the actions within the strategy, with all but one action having the support of at least 70% of respondents, and several having over 90% support.

The graph below shows the average percentage of respondents (including both public and stakeholders) who agreed with draft actions, as well as the range of agreement, within the different action categories. The “low” percentage reflects the action that had the lowest level of support in that category, while the “high” percentage represents the action that had the most support. For instance, within the Home and Workplace Charging category, respondents agreed or strongly agreed to the 12 actions 83% of the time on average. The action with the lowest support in that category was “Advocate for Right to Charge legislation”, which was supported by 70% of respondents, while “Promote incentives for EV charging infrastructure” received the highest support in that category, at 91%.

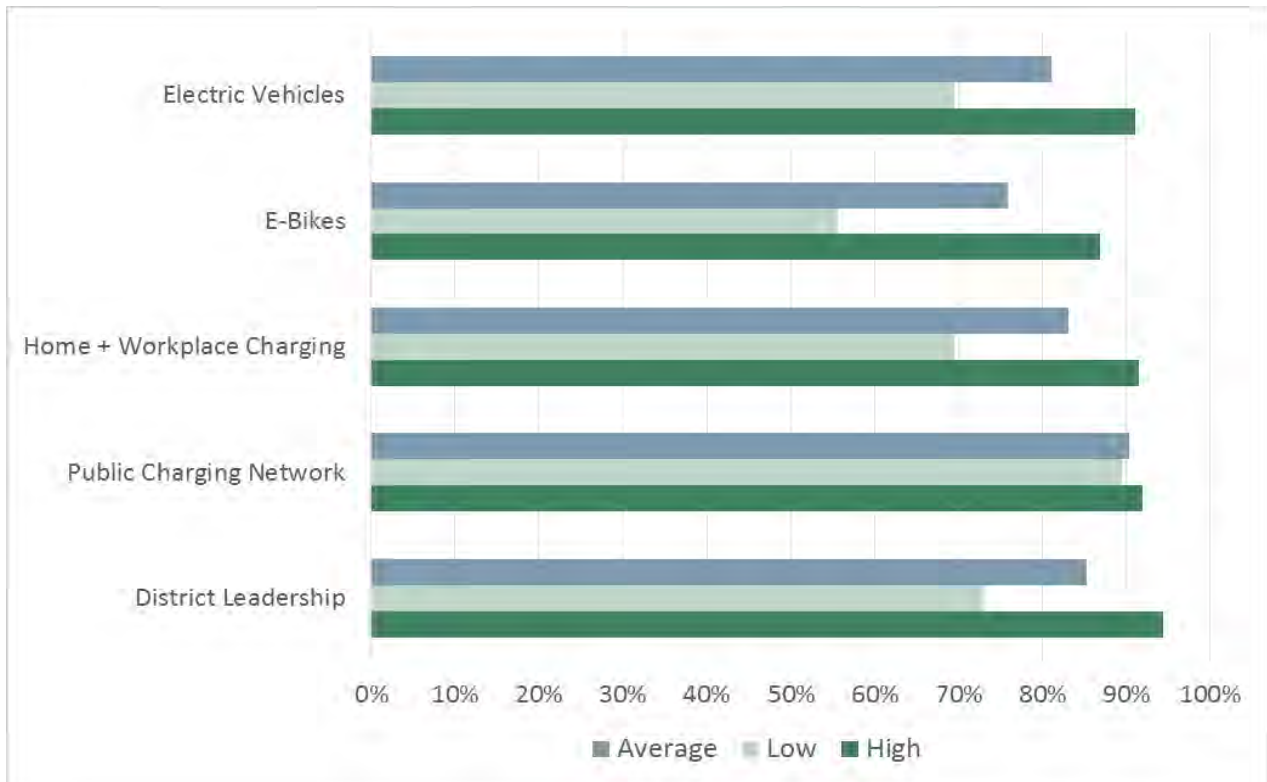


Figure 6: Level of support for draft actions, by category (Saanich Electric Mobility Strategy Survey)

Several new actions or sub-ideas within existing actions were added based on engagement feedback, namely to:

- Advocate that higher levels of government work to remove barriers to EV adoption: Monitor barriers to EV adoption and provide feedback and advocacy to higher levels of government or organizations as needed. This may include, but is not limited to:
 - Measurement Canada and the need for a meter certification that facilitates kWh billing
 - BC Hydro and the need for rate structures and fair/reasonable upgrade costs to facilitate electrification
 - Provincial government to ensure extended producer responsibility and the reuse and recycling of EV batteries
- Post speed limits on congested trails and provide secure bike/e-bike parking in commercial areas (added to EB3 as examples of safety and security measures that will be explored in collaboration with the CRD and other regional partners)
- Link people with opportunities to learn e-bike safety skills through community partners and/or recreation centres (added to EB7)
- Support off-site EV charging for multi-unit residential buildings (MURBs): Identify and pursue opportunities to support EV charging access for multi-unit residential buildings. This could include the installation of curb-side charging stations, or working with public and community institutions (e.g. District facilities, schools, churches) to install EV chargers that can be used overnight by residents in nearby MURBs.

Moreover, two actions were removed due to feedback from respondents and/or confusion about the intent of the action:

- Explore land use planning policy and bylaw changes that support future car dealership needs as vehicles electrify
- Review and update the Building Bylaw to consider amendments that support e-bikes

More details on the public and stakeholder feedback that warranted these amendments are provided in the following sections.

Members of the public & stakeholders

Feedback on the Overall Strategy Document

Survey questions were posed about the overall readability and usefulness of the strategy document. Respondents generally reported that they found the strategy easy to understand (84%), that the background information provided sufficient rationale for the Action Plan (80%), and that there were no major omissions (76%). The usefulness of the presented background information was also evaluated, with the responses summarized below.



Figure 7: Overall feedback on the Draft Strategy

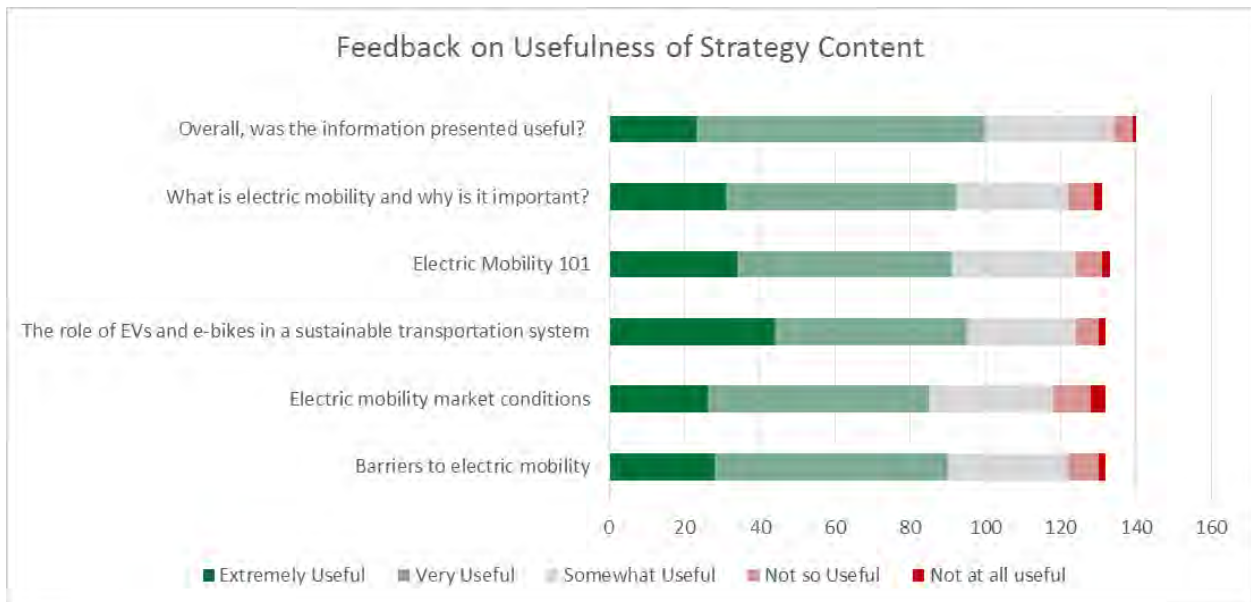


Figure 8: Feedback on the usefulness of the Strategy content

Comments related to the overall strategy were primarily in relation to:

- The document being too long for most readers
- Some of the graphs being difficult to interpret
- Sensitivity to the use of “accessibility” language and the need to clarify whether referring to people with physical disabilities
- A desire for more detailed costing information

- Missing information, detailed in the various sections below but most notably questions about battery lifespan and recycling
- A need to be more bold or ambitious in the strategy's targets and/or actions

There was also a small minority of individuals who stated they do not believe the climate science or do not agree that climate action should be a municipal priority, so were critical of all or most of the actions proposed.

Several amendments to the background information, graphs, and/or actions were made as a result of the comments received. In addition, a short summary document is being prepared that will complement the full Strategy and be publically available.

Overall feedback on proposed actions

Most actions had a very high level of support, with actions related to promoting Provincial and Federal incentives, supporting or encouraging businesses to convert their fleets, supporting the expansion of the public charging network (identifying gaps in the network, encouraging private sector charging provision, and embedding in Saanich planning processes), and developing a corporate fleet strategy all enjoying support from more than 90% of respondents.

Of the three actions that had less than 70% support in the first survey (March 2020), one was removed (an employee loan program for personal e-bike purchases) and the other two garnered more support in the second survey, perhaps due to the contextual background information that was provided as part of the draft strategy:

- Explore need for and provide incentives for EV charging infrastructure feasibility studies in existing MURBs if required (79% support, up from 68% of respondents in the first survey); and
- Develop a District e-bike fleet program (73% support, up from 68% of respondents in the first survey).

The only action that received a low level of support fell under the e-bike category and was intended to improve safety for e-bike and other vulnerable road users:

- Support lower speed limits on residential streets.

This action was supported by 56% of respondents, opposed by 25% of respondents, and 19% of people felt neutral on the subject. Staff decided to retain the action within the strategy, with the reasoning behind this decision discussed below.

Feedback by topic area

Many survey respondents provided comments that offered more insight on their level of agreement with particular actions, their support for electric mobility more generally, barriers to electric mobility they are experiencing, and/or priorities for action. Comments are summarized by action category as presented in the survey.

Electric Vehicles

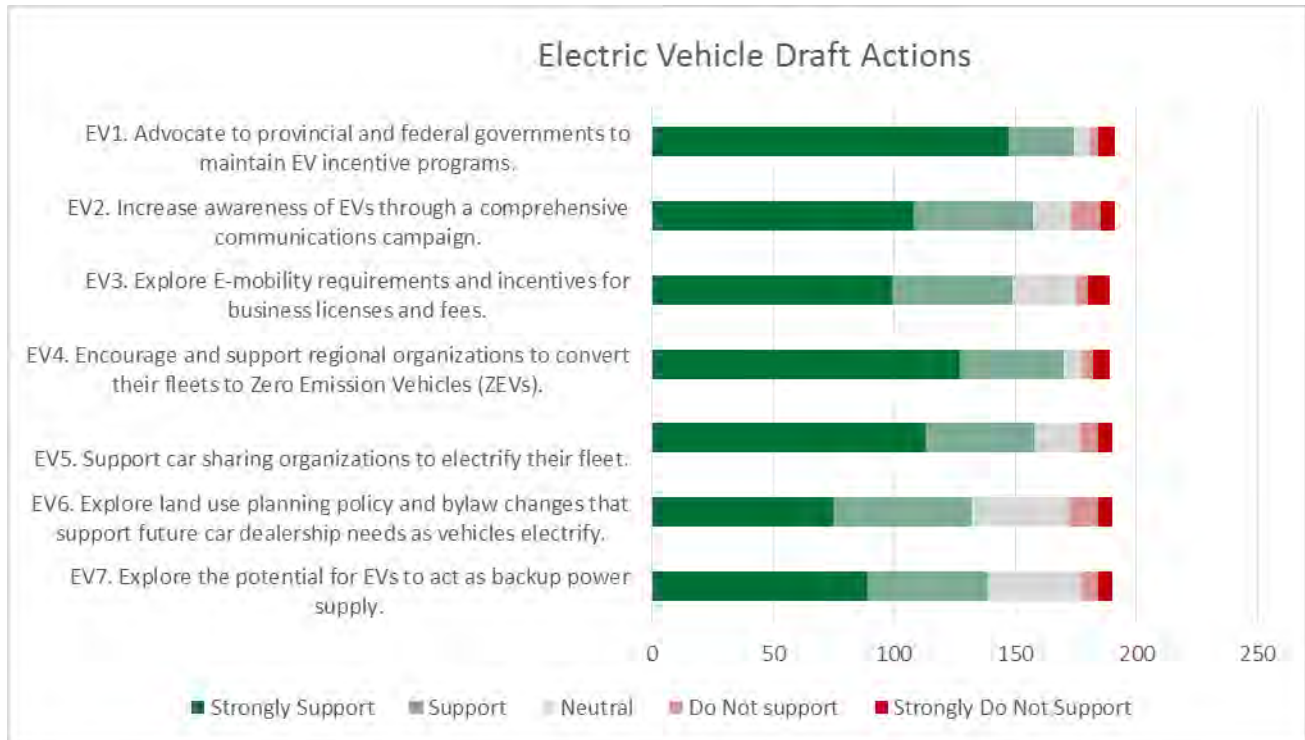


Figure 9: Level of support for electric vehicle draft actions

There was a very high level of support for Provincial/Federal incentives (for EVs as well as e-bikes and charging infrastructure), though there was concern from some respondents that higher income households will benefit disproportionately from EV investments. This is a concern that Saanich staff have identified as well, and advocacy for an income-qualified incentive program is included in the detailed description under EV1. Equity is also a guiding principle for the development of all programs under the Saanich Climate Plan and Electric Mobility Strategy.

Several respondents voiced that active transportation and public transit should be prioritized over private vehicle ownership. This is a central tenet of the Saanich Climate plan, and as a result, Saanich Council approved acceleration of the Active Transportation Plan as a key priority in the Saanich Climate Emergency Declaration and in the budget request approved in principle when the Climate Plan was approved in January 2020. However, rapid uptake of EVs will also be necessary in order to achieve our climate targets, as demonstrated in the Climate Plan GHG modelling. As such, the Electric Mobility Strategy is intended to further both these goals simultaneously.

There was a concern that EV uptake is limited by supply (i.e. not enough EVs on car dealership lots or long wait times). While this is not in Saanich’s jurisdiction to address directly, the Zero Emission Vehicle (ZEV) Mandate legislated by the Province of BC is a

key tool to address supply constraints. Some wording was added to the background section on the ZEV to highlight this.

There was mixed feedback on the need for communications and outreach – some felt it was very important, while others felt that it would be an ineffective strategy and/or that information on EVs is already widely available. Similarly, there were divergent views on action EV3, and some respondents felt that incentives would be appropriate for businesses (and business licences) but that the action should not introduce requirements for businesses to have EVs.

Action EV6 was intended to consider the land use potential of car dealership lots as more people are moving towards online car purchases; this action was removed as it was misinterpreted or confusing to many people, and it was assessed to be both a lower priority and outside the purview of the E-Mobility Strategy.

There was a lot of interest in the potential for EVs as backup power storage, though it was noted this would not contribute directly to our GHG reduction targets.

Some individuals suggested that additional “perks” for EV users should be introduced, such as parking discounts, priority parking or electric-only streets/zones. While this was considered in the first round of draft actions, the uptake of EVs is anticipated to be so rapid that the time period for these benefits would be limited. For example, Saanich is now introducing fees for our charging stations due to congestion issues.

Finally, several respondents suggested there were gaps in the actions related to authorities held by higher levels of government, such as electricity rate structures and certification of utility-grade meters. An additional action was included based on these comments that speaks to the role of Saanich conveying these barriers to higher levels of government and advocating for their amendments.

E-Bikes

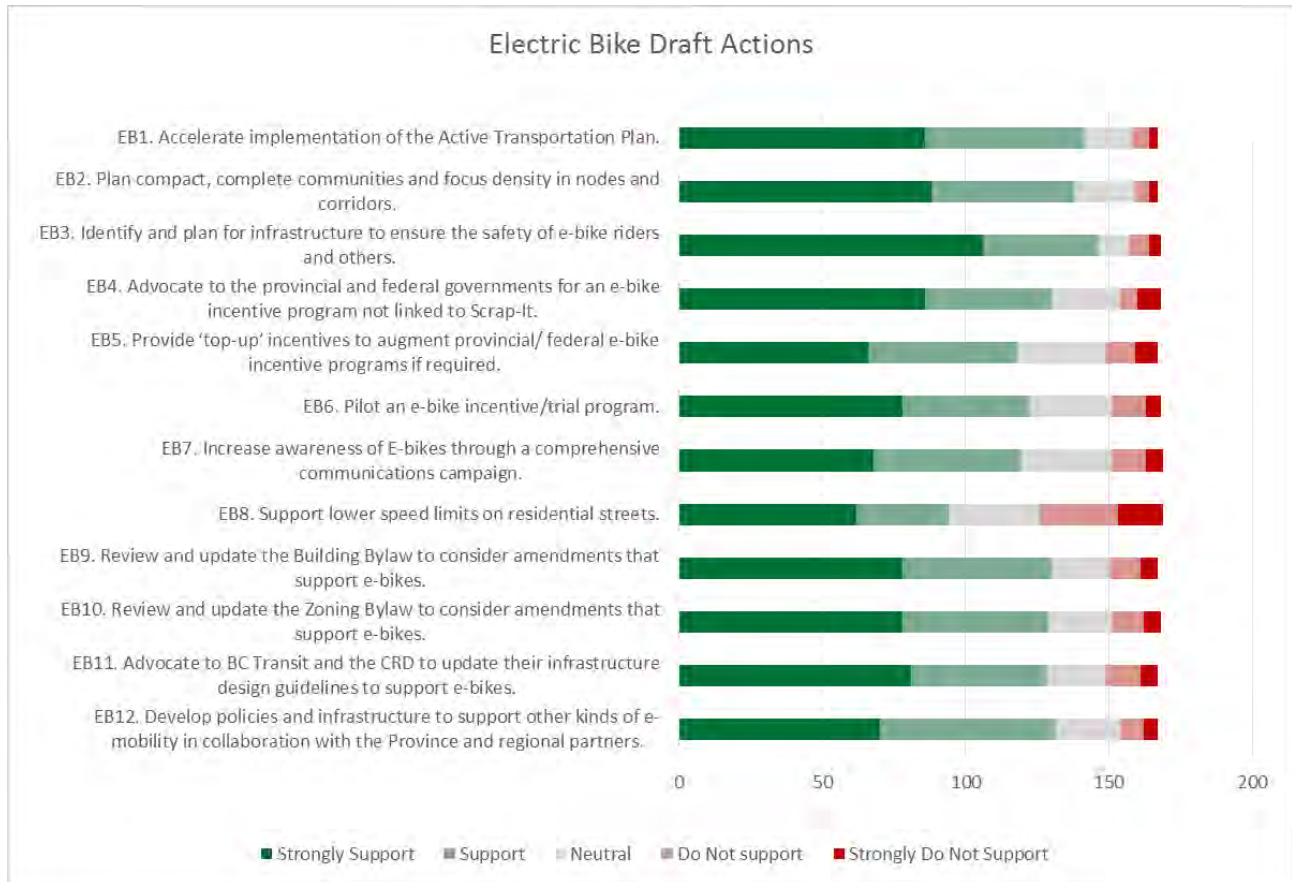


Figure 10: Level of support for electric bike draft actions

Many people supported and reiterated the importance of land use decisions in creating a more compact community that can be easily navigated by bike and other forms of active transportation. Similarly, there was strong support for continued implementation of bike infrastructure, noting that this helps e-bikes and conventional bikes as well.

There were safety concerns voiced by several respondents, and feedback that potential conflict between trail users (e.g. e-bike users and pedestrians) was not adequately addressed by the plan. Some made suggestions about posting and enforcing speed limits on congested trails and introducing e-bike and cycling skills courses. Two of the existing actions were amended to suggest these specific ideas. A couple of respondents suggested licensing be required for use of e-bikes; however, this is a provincial jurisdiction and a concept that would pose significant barriers to their use.

While the e-bike incentive program concepts were supported by most respondents, there were a few individuals who objected to municipal expenditures on e-bike incentives, while others were dubious that e-bikes were a viable alternative to cars or that they would not see considerable uptake in the community.

There were divergent views on the benefits of lowering speed limits on residential streets – many were strongly supportive, many were opposed. Those that opposed this action cited it being ineffective (drivers will still speed on residential streets) and/or or that it will increase congestion. However, the safety benefits of reducing speed limits are well documented, as is the twin benefit of increasing cycling mode share by creating safe conditions (both real and perceived) for active transportation. Road safety, climate action and active transportation are all high priority areas for the District of Saanich, and a regional pilot is being prepared to test the efficacy of this approach.

Concern over bike theft was noted by many participants and identified as an area that was not adequately addressed by the draft strategies. Similarly, some individuals commented that there should be actions related to public e-bike charging infrastructure. Ensuring residents and visitors have a secure place to both lock and charge their e-bikes at home, work or out in the community is a priority action captured by EB10, to review and amend the zoning bylaw (relatedly, EB9 was removed due to its redundancy with EB10, and because the zoning bylaw is the appropriate place to make these amendments). Increasing public e-bike charging locations was considered and further research was undertaken with local and regional organizations providing public e-bike charging. Based on the feedback regarding extremely low use, the fact that most e-bike riders charge at home and the portable nature of the battery meaning it can easily be removed and brought into buildings (e.g. coffee shops/offices) in instances where charging is needed, this was determined to be low priority.

Home and Workplace Charging

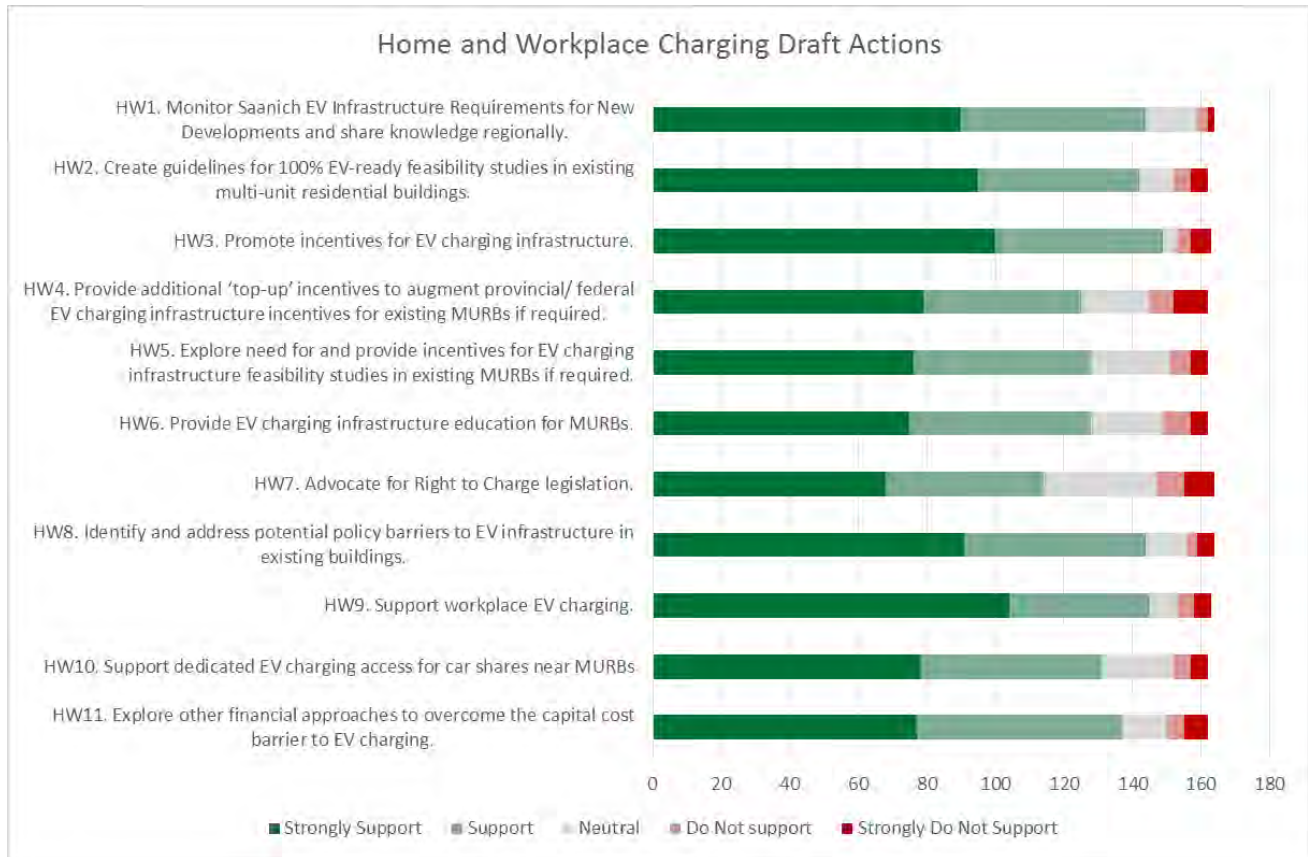


Figure 11: Level of support for home and workplace charging draft actions

Actions to help multi-unit residential buildings (education, incentives, better access to public charging etc.) were strongly supported and identified as an important need by many respondents. While the action regarding advocacy for Right to Charge legislation received less support than other actions (70%), many individuals commented on the importance and need for legislative change to help multi-unit buildings install charging. It was also emphasized as critical to achieving our targets by the Victoria EV Association.

There were several concerns voiced about the need for increased panel size or limited electrical capacity in existing buildings, as well as broader questions about the capacity of the electrical grid to handle large scale electrification. While increased electrical capacity is an important consideration, the use of energy management systems (e.g. load switching or load sharing between EVs or other household appliances) have enabled the efficient use of electrical capacity with minimal upgrades in most instances. Furthermore, the long term capacity of our electricity grid is being considered by BC Hydro given the Province’s low carbon electrification mandate.

Relatedly, many respondents suggested that on-site energy generation (e.g. solar/geothermal) be promoted in lockstep with vehicle electrification. While there are many



benefits to this, the GHG reduction potential is limited due our abundant supply of low-carbon hydroelectricity. It is an area that warrants further exploration, particularly in support of expanding BC’s long term electrical capacity to meet increasing electricity demands and the resiliency benefits of localized renewable energy generation. However, it is not an urgent priority with regards to supporting electric mobility or achieving our GHG reduction goals at this time.

Public Charging Network

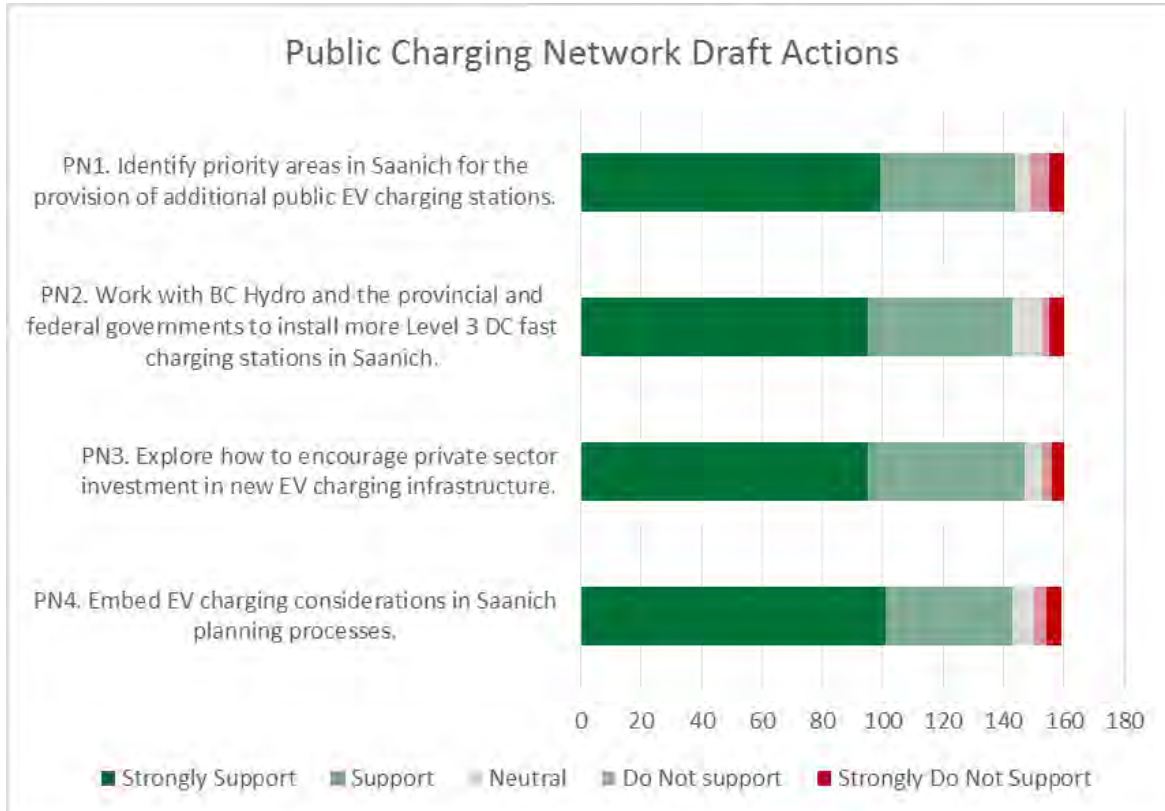


Figure 12: Level of support for public charging draft actions

There was a very high level of support for increased public charging opportunities. All actions were supported by at least 89% of respondents.

There was a desire for a more harmonized payment system for public EV charging stations. While this is not an area easily influenced by local government, it is our understanding that agreements are in place or in development between major station providers to allow for a more streamlined system of payment using the same card or app.

There were many comments throughout the survey results in relation to eliminating free charging at Saanich’s public EV stations (indicating the municipality should not be subsidizing fuel), as well as a few respondents who mentioned the need for enforced time limits and non-EV use of stalls. While offering a free public charging network was an important step to incentivize early adopters and build momentum towards EV uptake, as of



January 1, 2021, Saanich is introducing a fee for the use of its charging stations, as well as mechanisms to enforce their proper use.

District Leadership

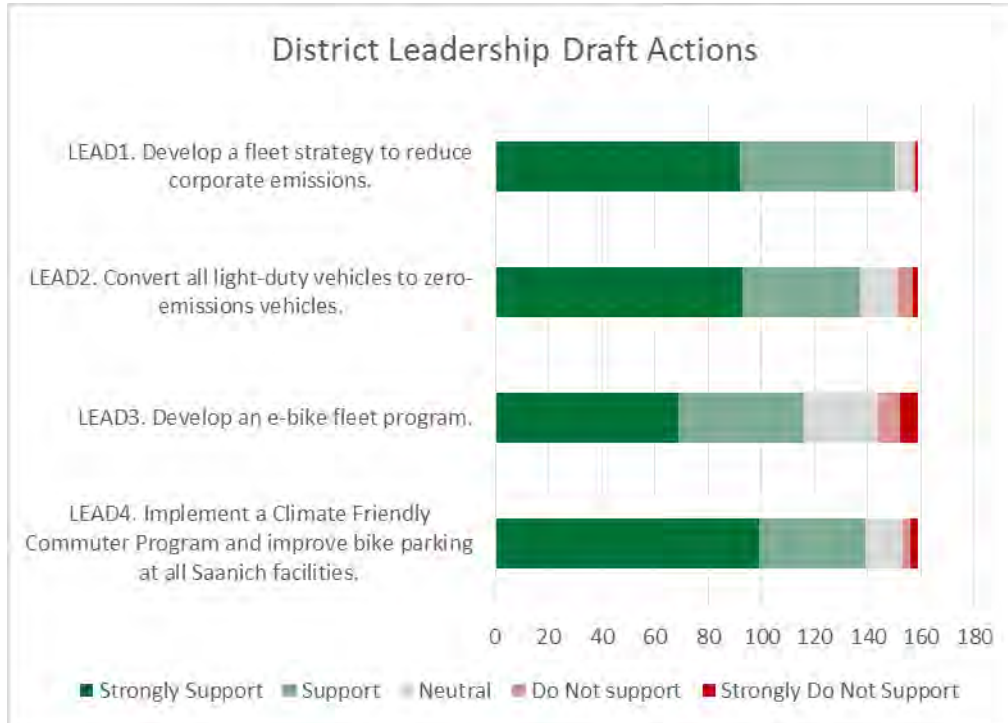


Figure 13: Level of support for home and workplace charging draft actions

There was an overall high level of support for District leadership actions, and comments throughout the survey urged the District of Saanich to demonstrate its commitment by taking action through their own fleet as well as encouraging sustainable commuting choices for their employees.

The action that had the lowest level of support was the development of a municipal e-bike fleet, which many respondents felt would be underutilized by staff, or that the geographic extent of Saanich would make biking impractical. The interest of Saanich staff in using an e-bike fleet will be further explored, but the close location of Saanich facilities such as the Municipal Hall and Public Works Yard on the Galloping Goose trail, as well as the success of other municipal e-bike fleets indicate there is potential for e-bikes to be a useful and cost-effective addition to Saanich’s pool of electric fleet vehicles.

Survey Respondent Information about the Use of EVs and E-bikes

The survey included questions about survey respondents, including whether they live in Saanich and if not, what community they live in; what kind of home they live in (single family or multi-family buildings); and whether they own or rent their home. There were also



questions about EVs and e-bikes, including whether they had or would consider buying an EV or e-bike, as well as questions related to EV charging and use of e-bikes.

EVs

The survey respondents who answered the question about whether they own an EV were almost equally divided, with 48% owning an EV. For those that don't own an EV, 49% indicated that their next vehicle purchase would be electric and a further 8% said they were planning on purchasing an EV in the next year. 87% of respondents have access to charging at home and 35% have access to charging at work (a significant increase from the 12% who had access at work in the previous survey). Most (90%) charge their EV at home, 17% regularly charge at work, and almost half (44%) use public charging stations.

E-bikes

Fewer respondents had familiarity with e-bikes, with 17% indicating they currently own one and 21% indicating they plan to buy one within the next year. For those that owned or were planning to buy an e-bike, 13% indicated that the e-bike replaced or would replace a vehicle.

Finally, respondents were asked how they use their e-bikes, or intend to use their e-bike once they buy it. Contrary to responses received from the first survey, most people use their e-bikes for recreation (80%) and to run errands (67%), whereas only 46% used their e-bikes for commuting to work compared with 77% in the first survey. 17% use their e-bike for taking their kids to and from school or activities compared with 37% in the first survey. It is possible that these lower percentages may be associated with an increase in the number of respondents working from home and reduced kid activities due to COVID-19.

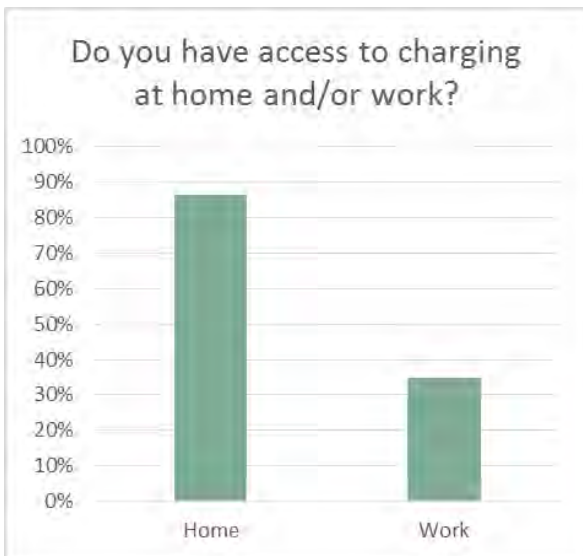


Figure 14: Access to EV charging – Survey 2 responses

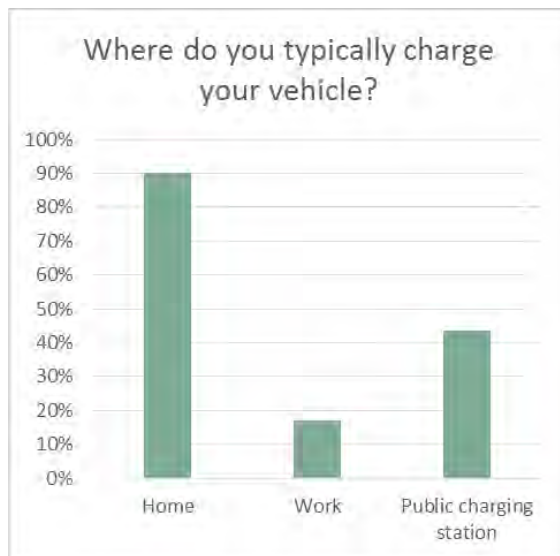


Figure 15: Typical charging locations – Survey 2 responses



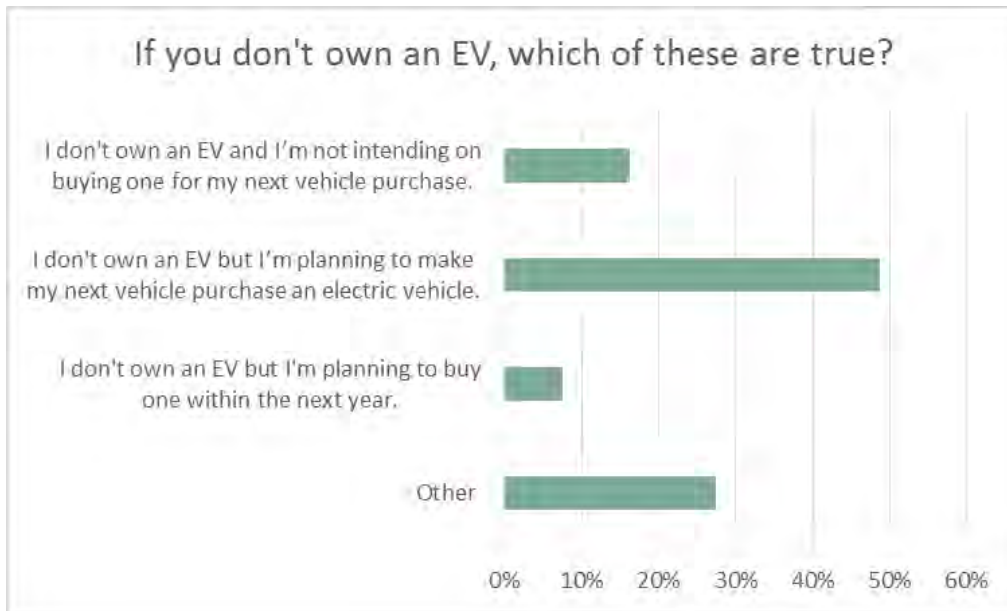


Figure 16: Plans for EV purchases – Survey 2 responses

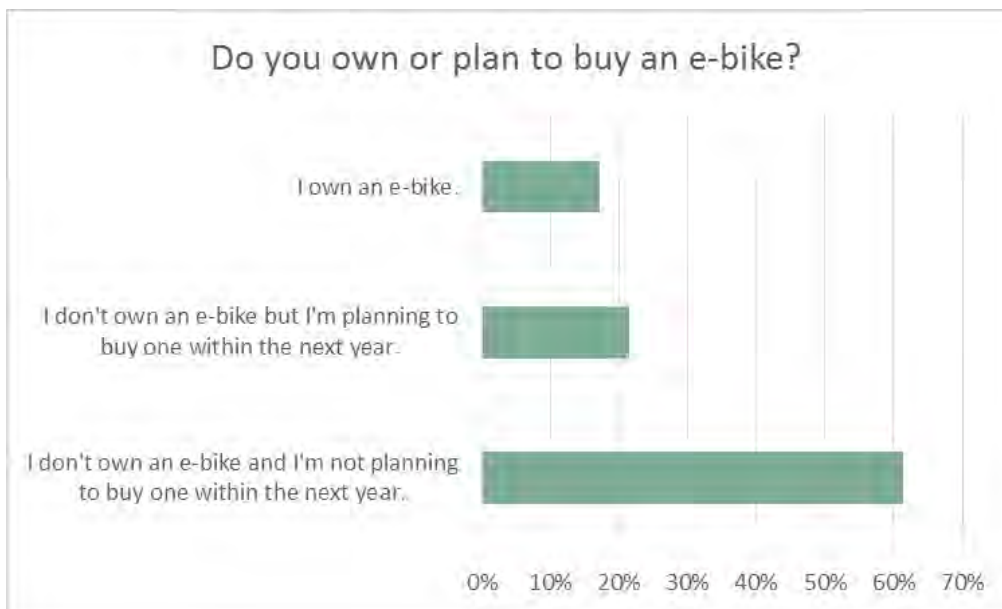


Figure 17: Plans for E-bike purchases – Survey 2 responses



Figure 18: Vehicle replacements with e-bikes – Survey 2 responses

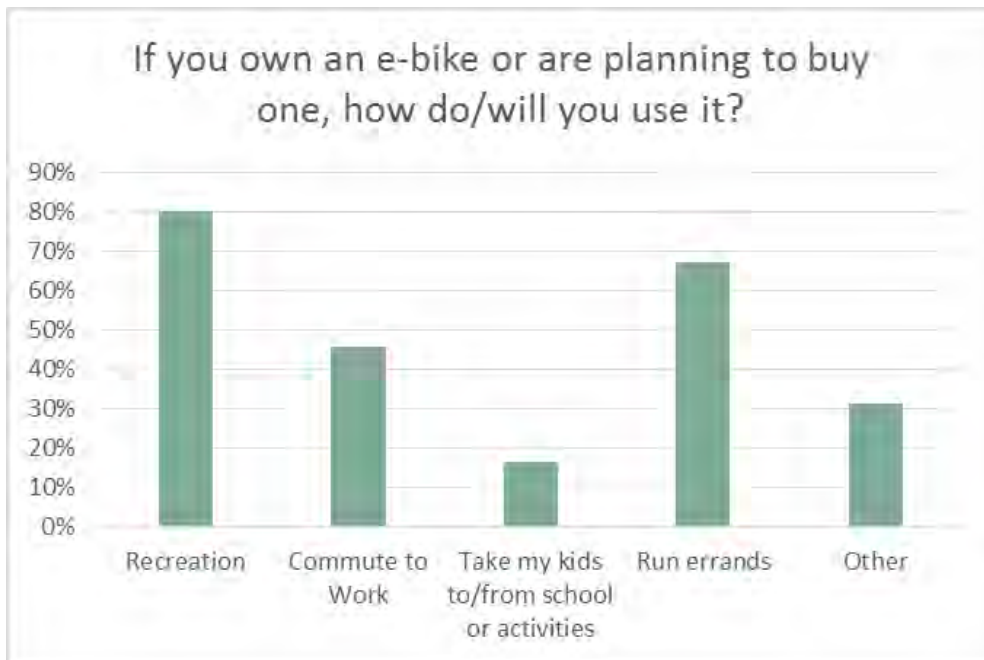


Figure 19: Use of e-bikes – Survey 2 responses

Appendix A: Survey results, by level of agreement

This appendix lists the proposed actions in order from the greatest to the least agreement of survey respondents, for both the Sustainable Mobility Survey (March 2020) in Table 2 and the Electric Mobility Survey (September 2020) in Table 3.

Table 2: Survey Respondent Support for Draft Actions in the Sustainable Mobility Survey (March 2020)

Focus Area	Action	Agree	Neutral	Disagree
District Leadership	Develop a fleet strategy to reduce corporate emissions.	96%	1%	2%
Home + Workplace Charging	Measure and monitor demand for at-work and public EV charging stations.	94%	3%	3%
Home + Workplace Charging	Implement and monitor the new EV-ready requirements for new construction that were approved by Council in September 2019.	94%	2%	4%
Home + Workplace Charging	Evaluate the EV-ready requirements to determine whether they are achieving the desired outcomes. Adjust the requirements as needed.	94%	4%	2%
EVs	Advocate for the development of EV incentive programs that specifically support access to EVs and charging infrastructure for residents and businesses that might otherwise not have access or that have less access.	94%	2%	5%
Public Charging Network	Review management options for District-owned public EV chargers, such as time limits and fees, to ensure optimal use of chargers.	93%	3%	4%
Home + Workplace Charging	Promote provincial and federal financial incentives for installing EV charging infrastructure in existing homes and workplaces.	92%	4%	4%
EVs	Explore how to encourage and support BC Transit, School Districts, businesses, and other organizations in Saanich to convert their fleets to zero emission vehicles.	91%	5%	4%
Public Charging Network	Work with BC Hydro and the provincial and federal governments to install more DC fast charging stations in Saanich, in locations that are convenient for travelers and residents of existing multi-family buildings.	91%	4%	5%
Home + Workplace Charging	Consider installing workplace charging stations at District facilities, particularly where the stations could be used by the public outside of business hours.	90%	6%	4%
Home + Workplace Charging	Explore and address potential District of Saanich process or policy barriers to installing EV infrastructure in existing buildings.	90%	7%	4%

Focus Area	Action	Agree	Neutral	Disagree
Public Charging Network	Embed EV charging considerations in Saanich planning processes so opportunities to identify gaps or expand or upgrade infrastructure are assessed at key planning junctures (e.g. local area plans, facility upgrades, etc.).	90%	4%	6%
EVs	Support and encourage the provincial and federal Zero Emission Vehicle mandates.	89%	7%	4%
E-Bikes	Explore ways to improve bike parking at existing industrial, commercial and multi-unit residential buildings for tenants and visitors.	89%	5%	6%
District Leadership	Convert all light-duty vehicles to zero-emissions vehicles.	88%	7%	5%
Home + Workplace Charging	Provide education and resource materials for strata councils and rental apartment building owners interested in installing charging stations in their buildings.	87%	9%	5%
Public Charging Network	Explore the need for and potential implementation of a curb-side public charging network in areas with higher density multi-family homes that may be challenging or costly to retrofit in the short term.	86%	6%	7%
E-Bikes	Continue to implement the Active Transportation Plan, including the accelerated implementation called for in the Climate Plan.	86%	9%	5%
Home + Workplace Charging	Explore potential financial approaches to help overcome the capital cost barrier for installing EV charging infrastructure, such as EV charging manufacturer shared cost models or tax incentive programs.	86%	7%	8%
Public Charging Network	Explore how to encourage private sector investment in new EV charging infrastructure, for instance by allowing installation of charging infrastructure in public right of ways or through rezoning and development approval processes.	85%	9%	5%
Public Charging Network	Double the number of District-owned public EV charging stations.	85%	7%	7%
Home + Workplace Charging	Consider working with large employers to support and promote installation of workplace charging stations.	85%	9%	6%
E-Bikes	Consider amending the bicycle parking requirements for new developments in Saanich's Zoning Bylaw to accommodate e-bikes, for instance by requiring increased security, shelter from precipitation and cold, larger spaces, and/or access to charging.	83%	8%	9%
EVs	Explore how to encourage and support car sharing organizations to electrify their fleets.	80%	17%	3%
Education and Outreach	Identify whether there are particular groups or kinds of residents or businesses with barriers to accessing EVs or charging stations, and ensure they are central to the planning and implementation of Saanich initiatives to support EV uptake.	80%	14%	7%

Focus Area	Action	Agree	Neutral	Disagree
Home + Workplace Charging	Consider topping up incentives for multi-family residential buildings.	79%	10%	10%
Education and Outreach	Partner with relevant organizations and local groups (e.g. Emotive and PluginBC, local EV clubs, the Vancouver Island Strata Owners Association, etc.) to host “ride and drives” and increase education and awareness of EVs through diverse channels.	78%	9%	13%
Home + Workplace Charging	Consider approaches to support dedicated EV charging access for car sharing organizations in or near multi-unit residential buildings.	77%	15%	8%
EVs	Advocate that electrification of ride hailing vehicles be a priority and included in Provincial regulation of these services.	77%	13%	10%
E-Bikes	Consider encouraging or requiring provision of end of trip facilities in new developments. End of trip facilities might include showers, lockers, secure bike parking, and e-bike charging.	76%	16%	7%
Public Charging Network	Explore how to support access to EV charging stations for car share organizations.	76%	16%	8%
District Leadership	Improve bike parking at all Saanich facilities to meet or exceed current bylaw requirements for new construction, with a focus on replacing car parking with bike parking (rather than removing green space) and adding charging stations for e-bikes and e-scooters.	76%	12%	12%
E-Bikes	Pilot an e-bike incentive program, ideally in collaboration with other municipalities in the Greater Victoria area.	75%	13%	13%
EVs	Explore opportunities for non-financial incentives that promote and raise the profile of EVs in Saanich, such as priority parking.	74%	13%	13%
EVs	Work with research institutions, BC Hydro, and other stakeholders to explore the potential for EVs to act as a backup power supply during power outages.	73%	20%	7%
Home + Workplace Charging	Advocate to the provincial government to enact Right to Charge legislation.	73%	19%	8%
District Leadership	Develop a District e-bike fleet program.	69%	17%	14%
Home + Workplace Charging	Consider providing a financial incentive to help offset the cost of feasibility studies for installing EV charging infrastructure in multi-family residential buildings.	68%	17%	14%
District Leadership	Implement an employee loan program for personal e-bike purchases to be repaid on employee pay cheques (the employee would also pay the interest).	53%	28%	19%

Table 3: Survey Respondent Support for Draft Actions in the Electric Mobility Survey (September 2020)

Focus Area	Action	Agree	Neutral	Disagree
District Leadership	Develop a fleet strategy to reduce corporate emissions.	94%	4%	1%
Public Charging Network	Explore how to encourage private sector investment in new EV charging infrastructure.	92%	4%	4%
Home and Workplace Charging	Promote incentives for EV charging infrastructure.	91%	2%	6%
Electric Vehicles	Advocate to provincial and federal governments to maintain EV incentive programs.	91%	4%	5%
Public Charging Network	Identify priority areas in Saanich for the provision of additional public EV charging stations.	90%	3%	7%
Electric Vehicles	Encourage and support regional organizations to convert their fleets to Zero Emission Vehicles (ZEVs).	90%	4%	6%
Public Charging Network	Embed EV charging considerations in Saanich planning processes.	90%	4%	6%
Public Charging Network	Work with BC Hydro and the provincial and federal governments to install more Level 3 DC fast charging stations in Saanich.	89%	6%	4%
Home and Workplace Charging	Support workplace EV charging.	89%	5%	6%
Home and Workplace Charging	Monitor Saanich EV Infrastructure Requirements for New Developments and share knowledge regionally.	88%	9%	3%
Home and Workplace Charging	Identify and address potential policy barriers to EV infrastructure in existing buildings.	88%	7%	5%
Home and Workplace Charging	Create guidelines for 100% EV-ready feasibility studies in existing multi-unit residential buildings.	88%	6%	6%
District Leadership	Implement a Climate Friendly Commuter Program and improve bike parking at all Saanich facilities.	87%	9%	4%
E-Bikes	Identify and plan for infrastructure to ensure the safety of e-bike riders and others.	87%	7%	7%
District Leadership	Convert all light-duty vehicles to zero-emissions vehicles.	86%	9%	5%
Home and Workplace Charging	Explore other financial approaches to overcome the capital cost barrier to EV charging.	85%	8%	7%

Focus Area	Action	Agree	Neutral	Disagree
E-Bikes	Accelerate implementation of the Active Transportation Plan.	84%	10%	5%
Electric Vehicles	Support car sharing organizations to electrify their fleet.	83%	10%	7%
E-Bikes	Plan compact, complete communities and focus density in nodes and corridors.	83%	13%	5%
Electric Vehicles	Increase awareness of EVs through a comprehensive communications campaign.	82%	8%	9%
Home and Workplace Charging	Support dedicated EV charging access for car shares near MURBs	81%	13%	6%
Home and Workplace Charging	Explore need for and provide incentives for EV charging infrastructure feasibility studies in existing MURBs if required.	79%	14%	7%
Home and Workplace Charging	Provide EV charging infrastructure education for MURBs.	79%	13%	8%
Electric Vehicles	Explore E-mobility requirements and incentives for business licenses and fees.	79%	14%	7%
E-Bikes	Develop policies and infrastructure to support other kinds of e-mobility in collaboration with the Province and regional partners.	78%	14%	8%
E-Bikes	Review and update the Building Bylaw to consider amendments that support e-bikes.	78%	12%	10%
E-Bikes	Advocate to the provincial and federal governments for an e-bike incentive program not linked to Scrap-It.	77%	14%	8%
Home and Workplace Charging	Provide additional 'top-up' incentives to augment provincial/ federal EV charging infrastructure incentives for existing MURBs if required.	77%	12%	10%
E-Bikes	Review and update the Zoning Bylaw to consider amendments that support e-bikes.	77%	13%	10%
E-Bikes	Advocate to BC Transit and the CRD to update their infrastructure design guidelines to support e-bikes.	77%	13%	11%
District Leadership	Develop an e-bike fleet program.	73%	18%	9%
Electric Vehicles	Explore the potential for EVs to act as backup power supply.	73%	21%	6%
E-Bikes	Pilot an e-bike incentive/trial program.	73%	17%	10%
E-Bikes	Provide 'top-up' incentives to augment provincial/ federal e-bike incentive programs if required.	71%	19%	11%
E-Bikes	Increase awareness of E-bikes through a comprehensive communications campaign.	70%	19%	11%
Home and Workplace Charging	Advocate for Right to Charge legislation.	70%	20%	10%

Focus Area	Action	Agree	Neutral	Disagree
Electric Vehicles	Explore land use planning policy and bylaw changes that support future car dealership needs as vehicles electrify.	69%	21%	9%
E-Bikes	Support lower speed limits on residential streets.	56%	19%	25%
District Leadership	Develop a fleet strategy to reduce corporate emissions.	94%	4%	1%

Appendix B: Sustainable Mobility Survey Detailed Results

This appendix provides detailed information on the responses from members of the public and stakeholders to the Sustainable Mobility Strategy survey in March 2020.

Figure 20: Electric Vehicles - Public survey responses on proposed actions

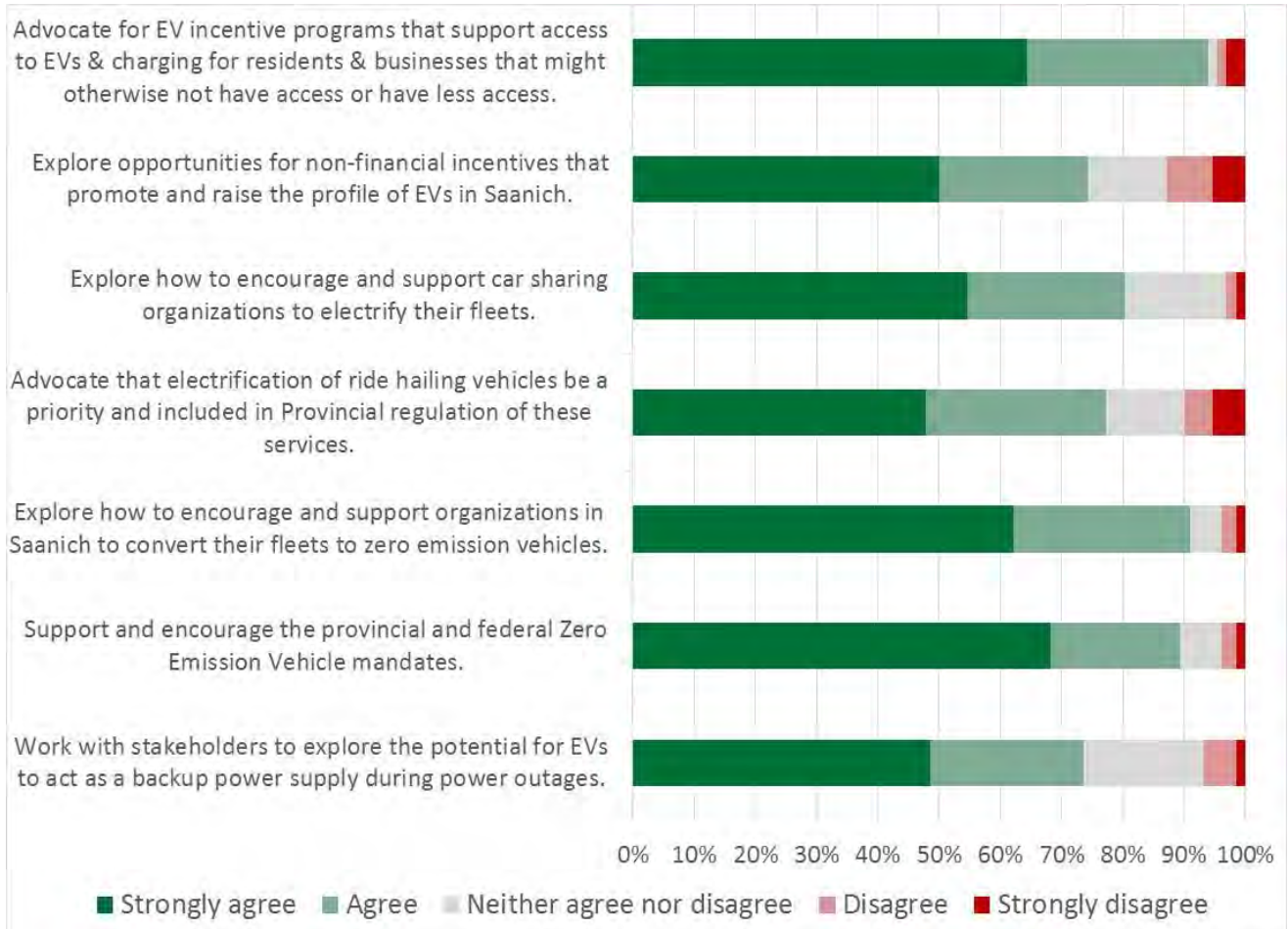


Figure 21: E-bikes - Public survey responses on proposed actions

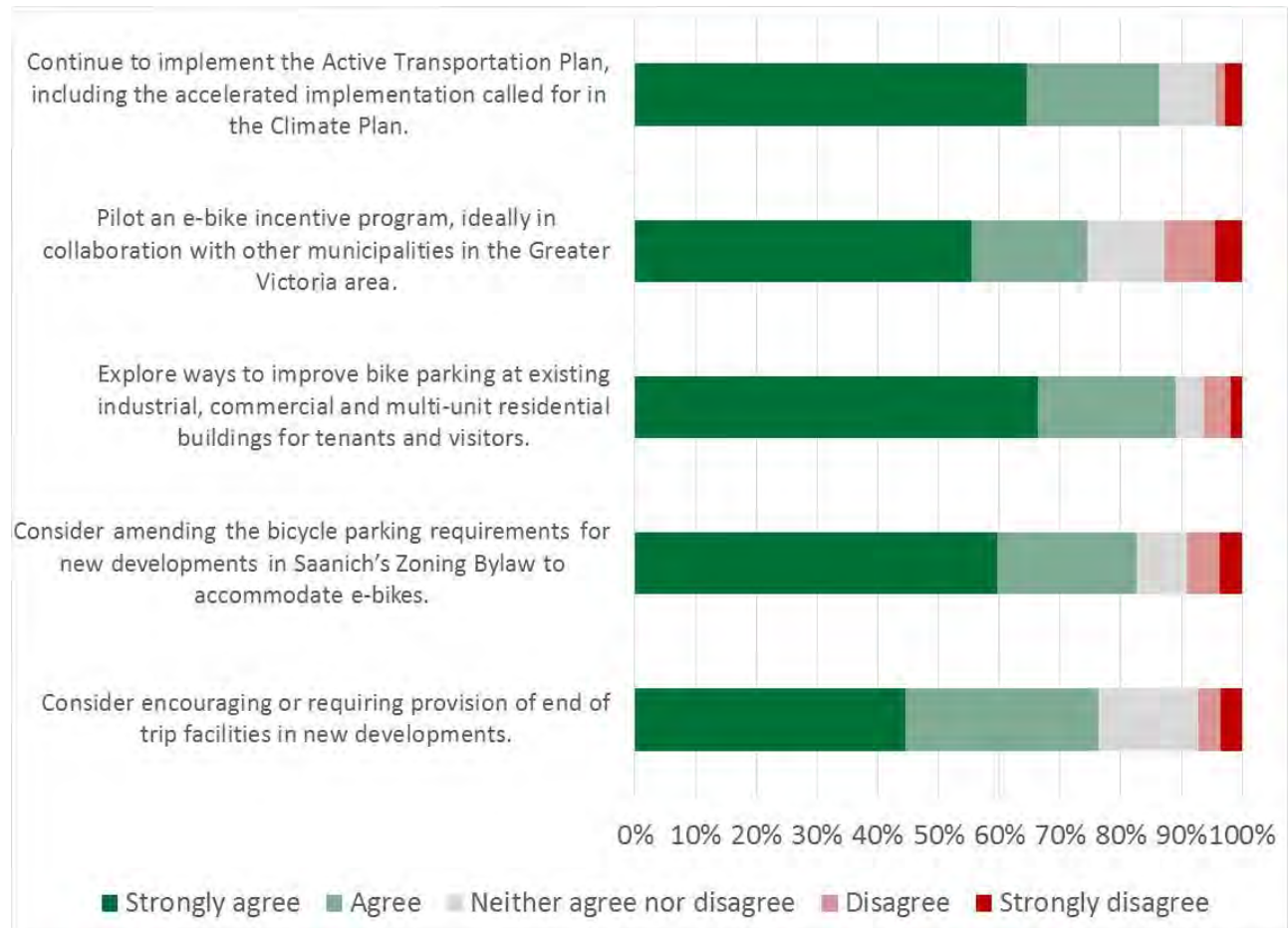


Figure 22: Home + workplace charging - Public survey responses on proposed actions

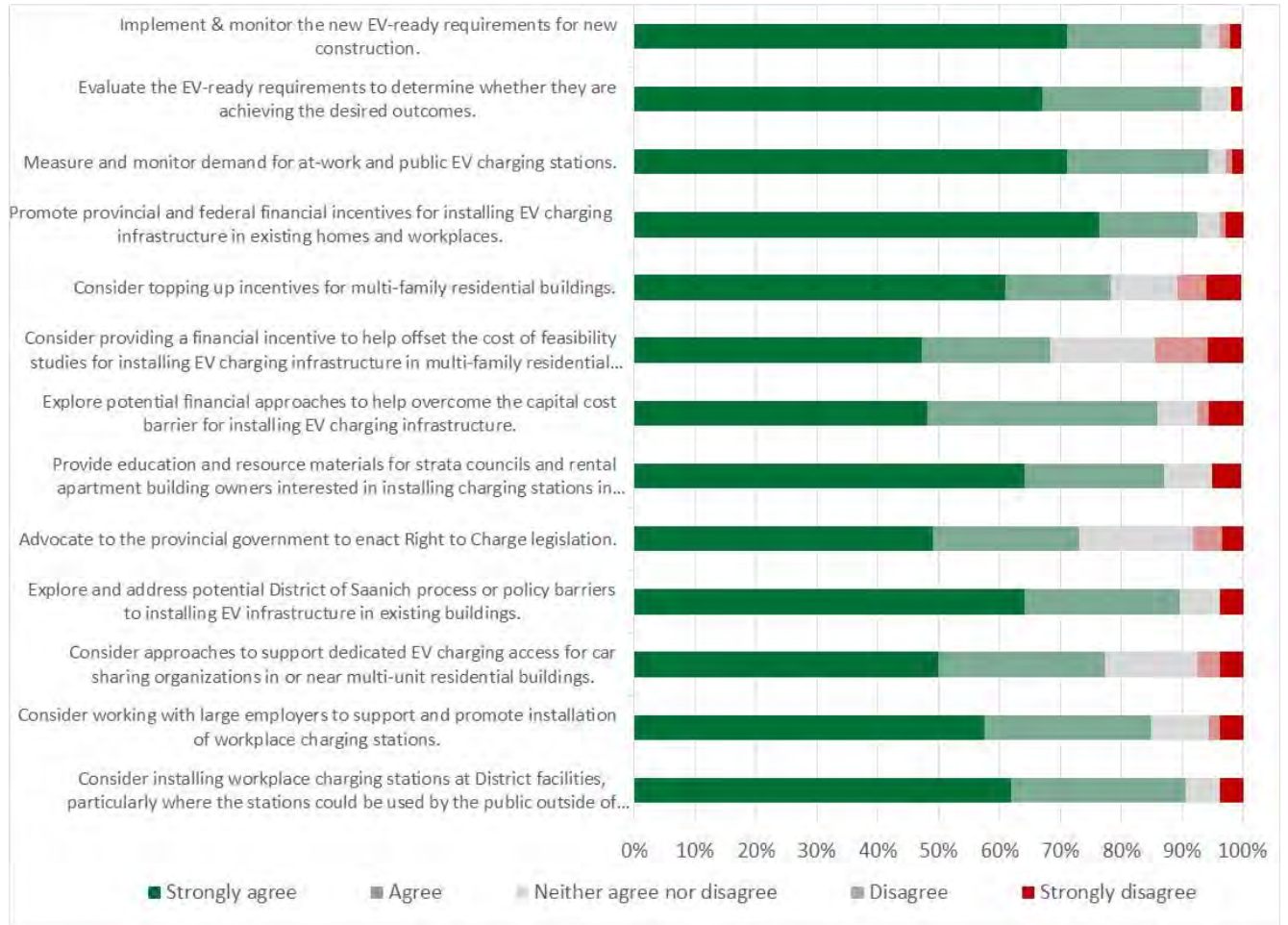


Figure 23: Public charging network- Public survey responses on proposed actions

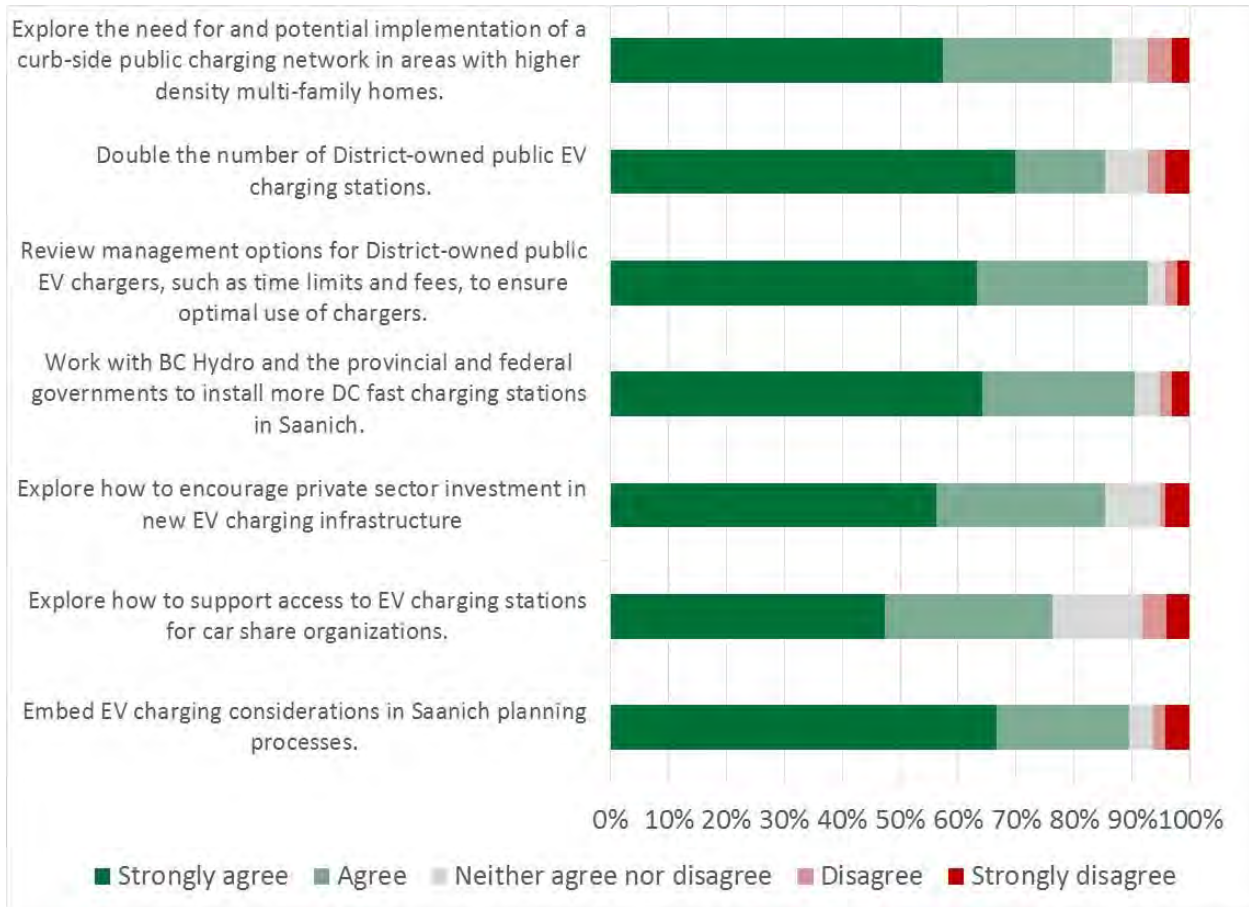


Figure 24: Education + outreach - Public survey responses on proposed actions

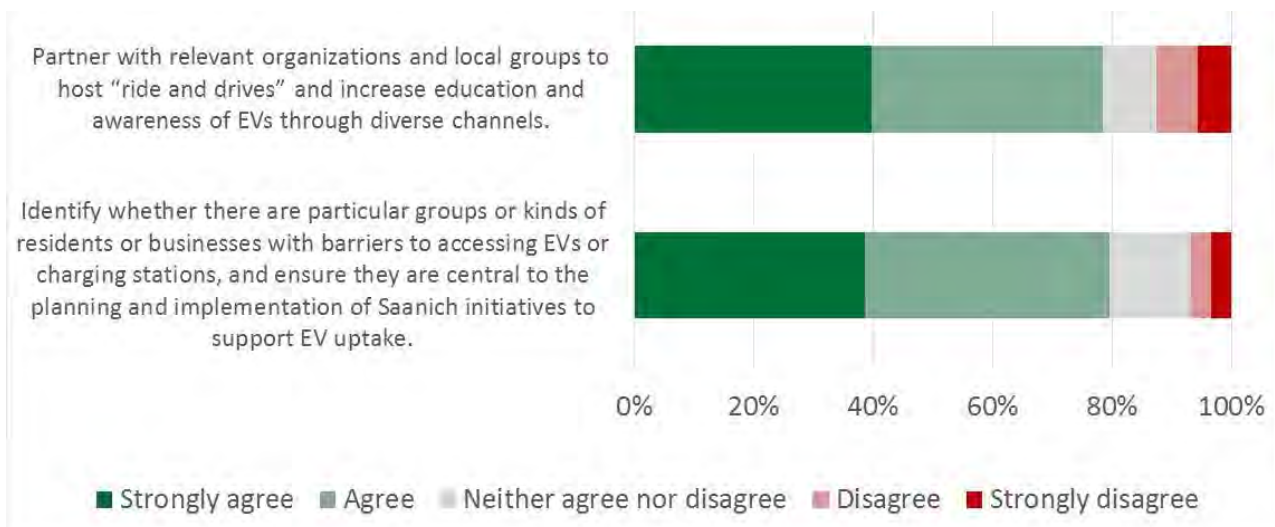


Figure 25: District leadership - Public survey responses on proposed actions

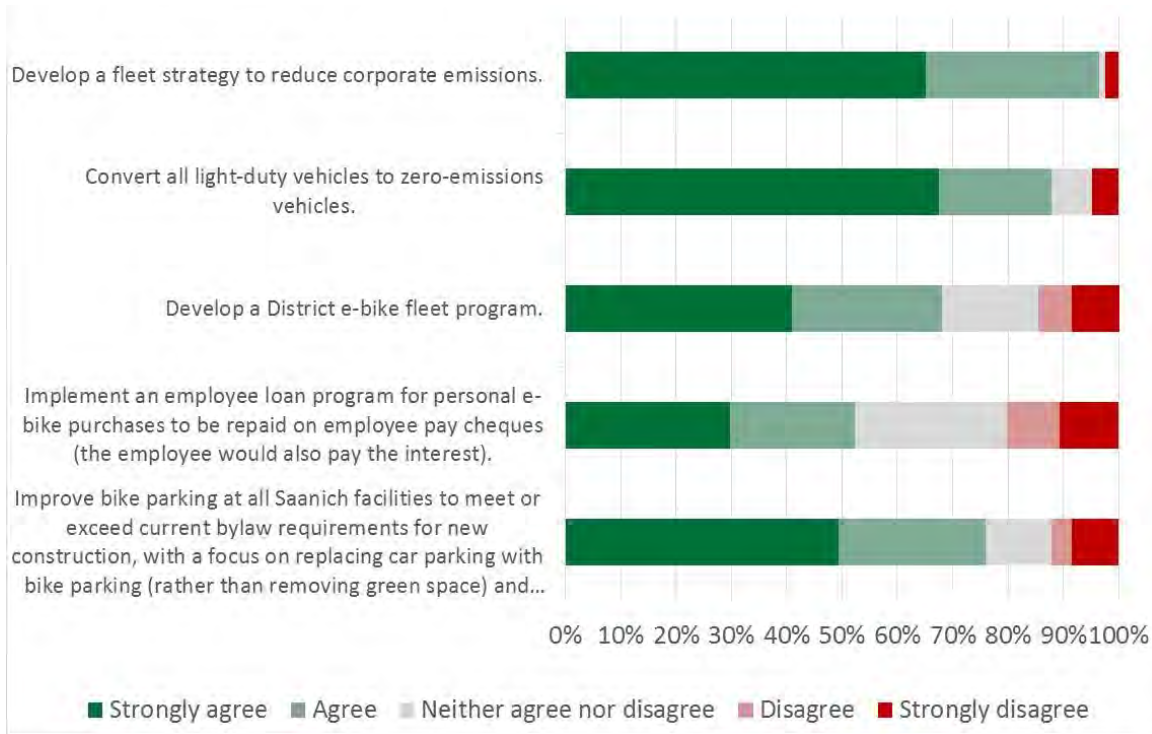


Figure 26: Electric Vehicles - Stakeholder survey responses on proposed actions

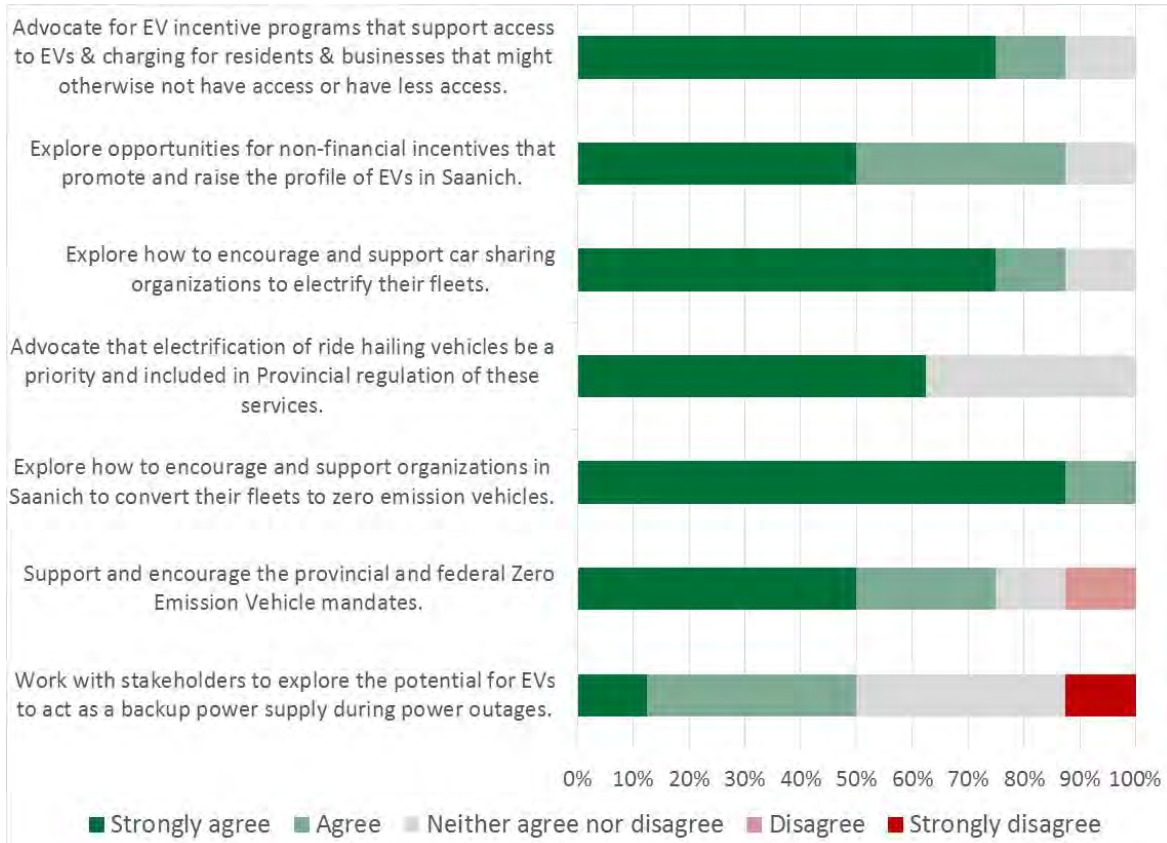


Figure 27: E-bikes - Stakeholder survey responses on proposed actions

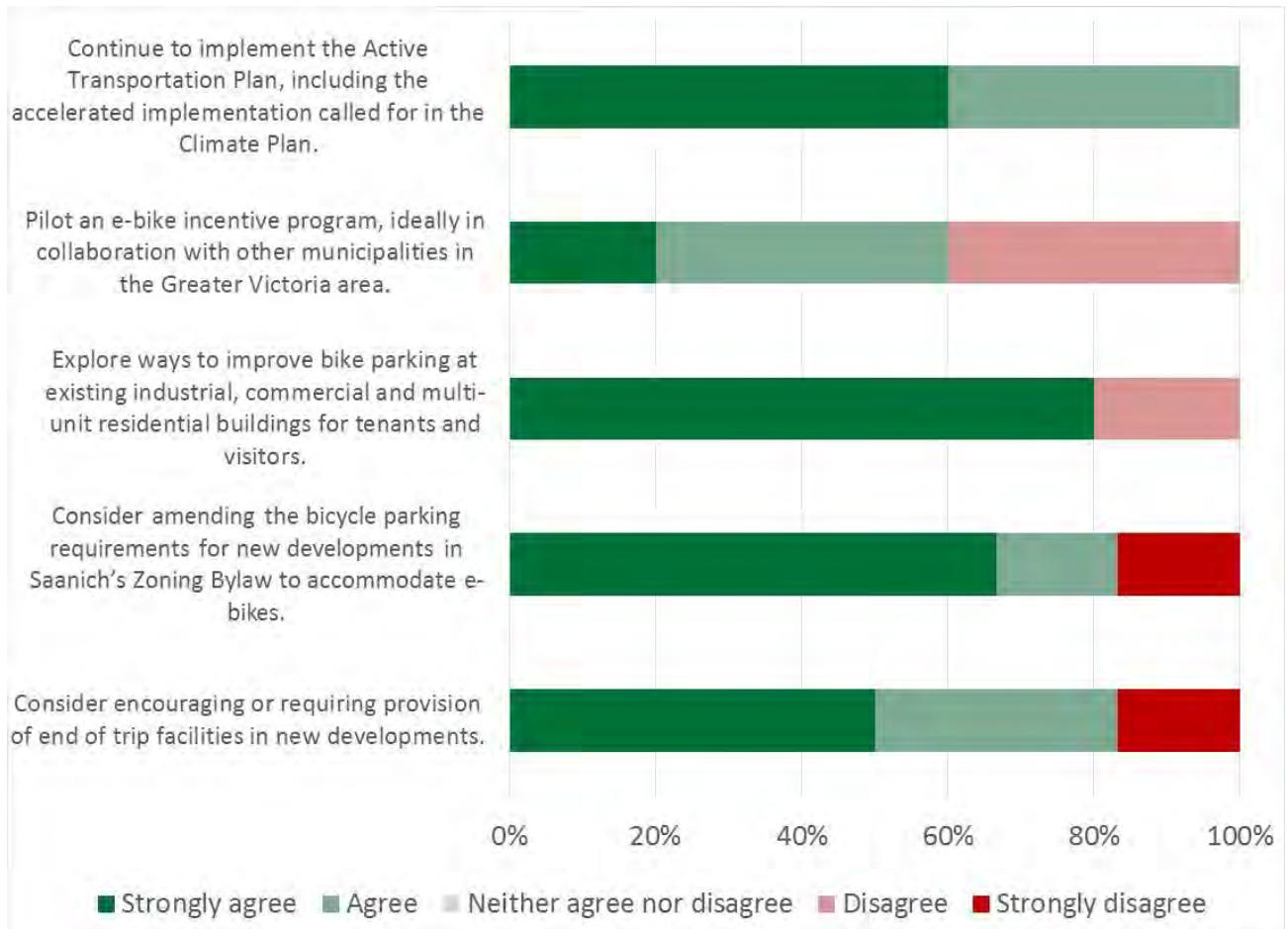


Figure 28: Home + workplace charging - Stakeholder survey responses on proposed actions

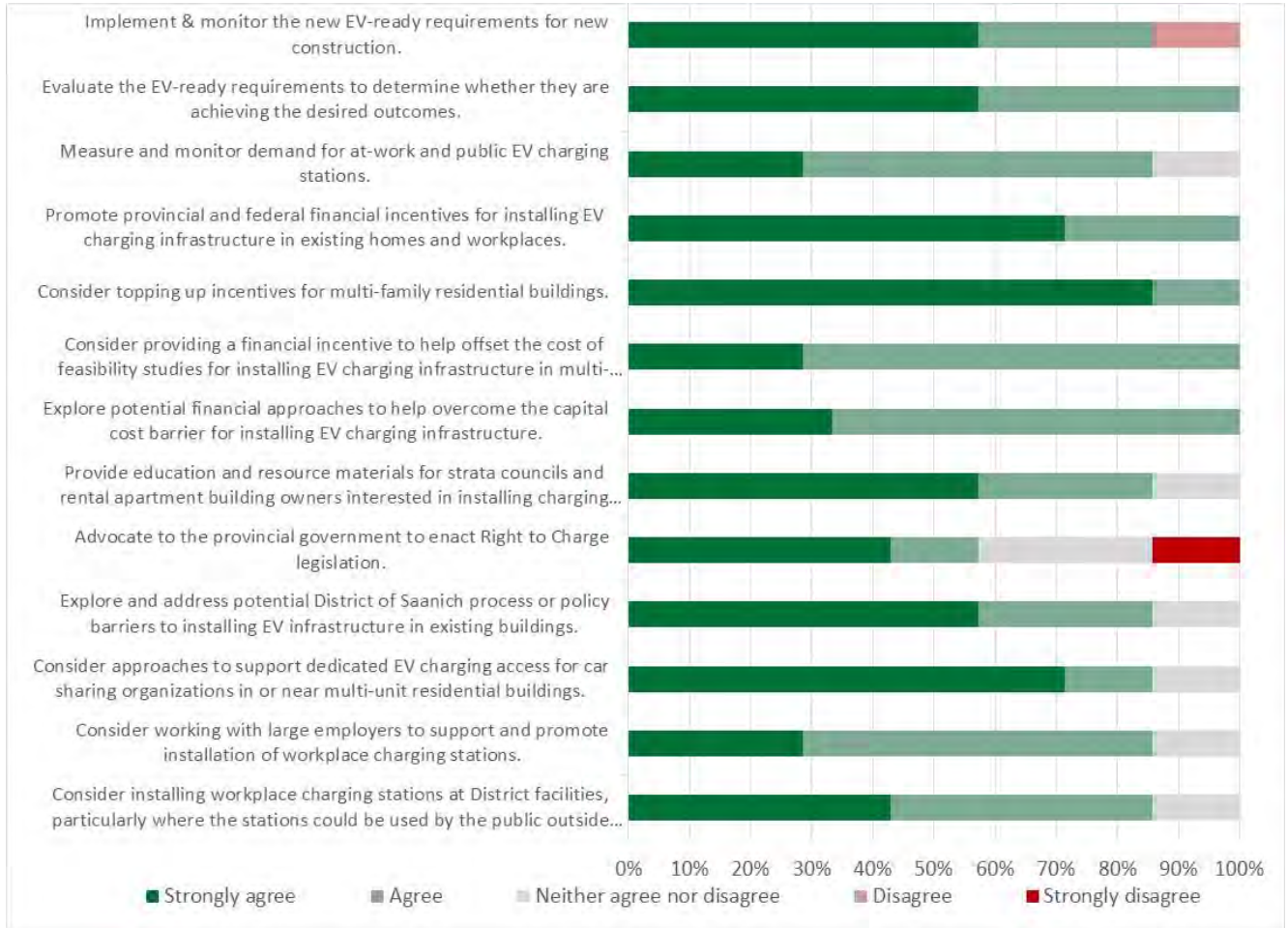


Figure 29: Public charging network - Stakeholder survey responses on proposed actions

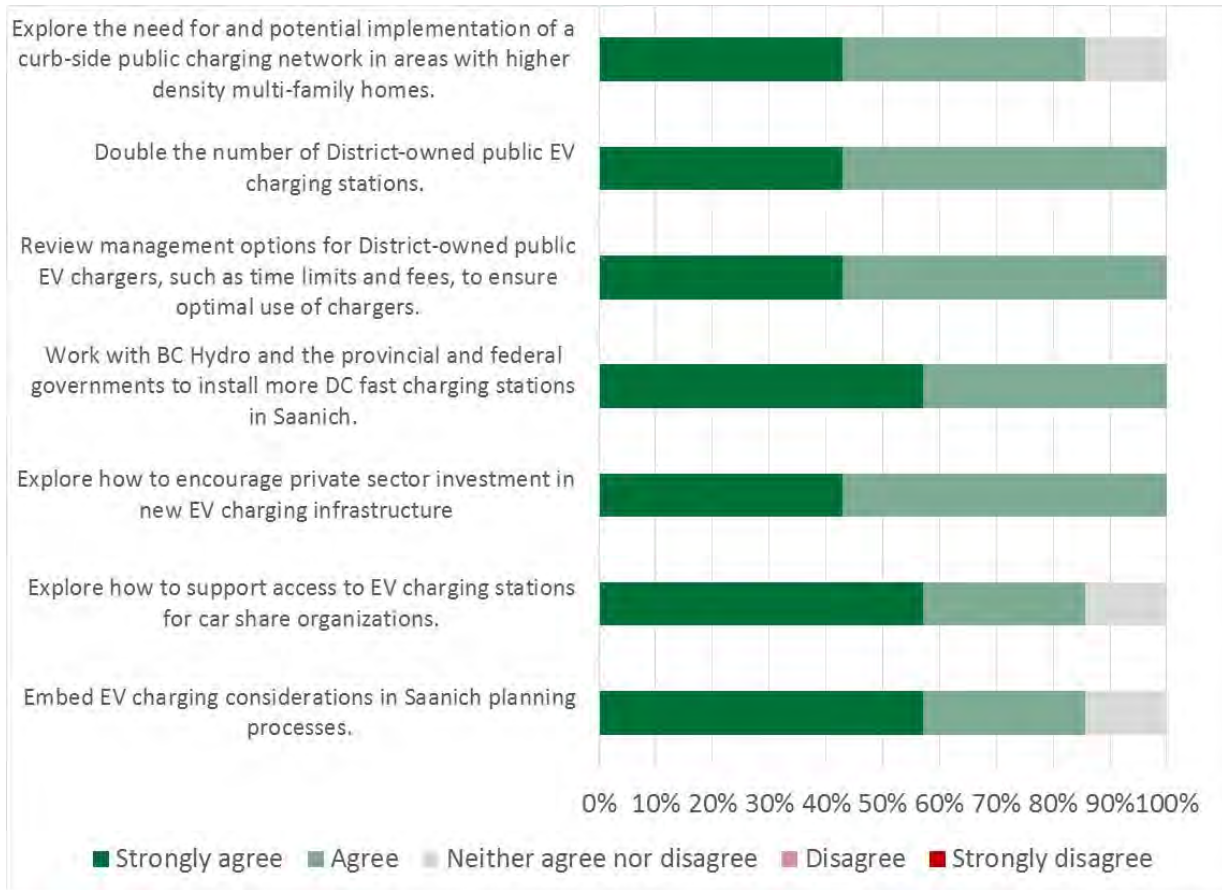


Figure 30: Education + outreach - Stakeholder survey responses on proposed actions

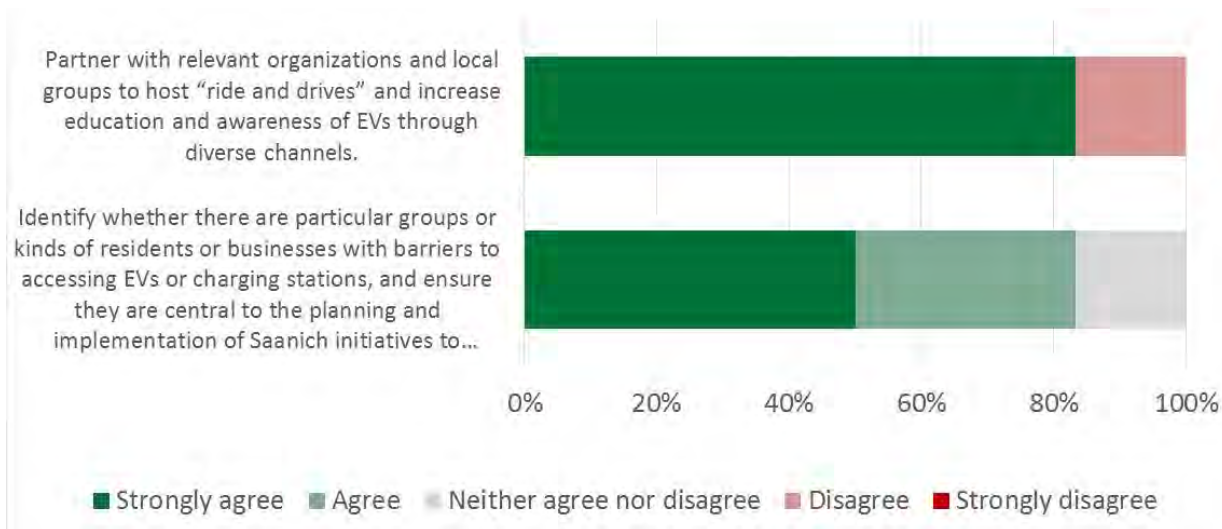
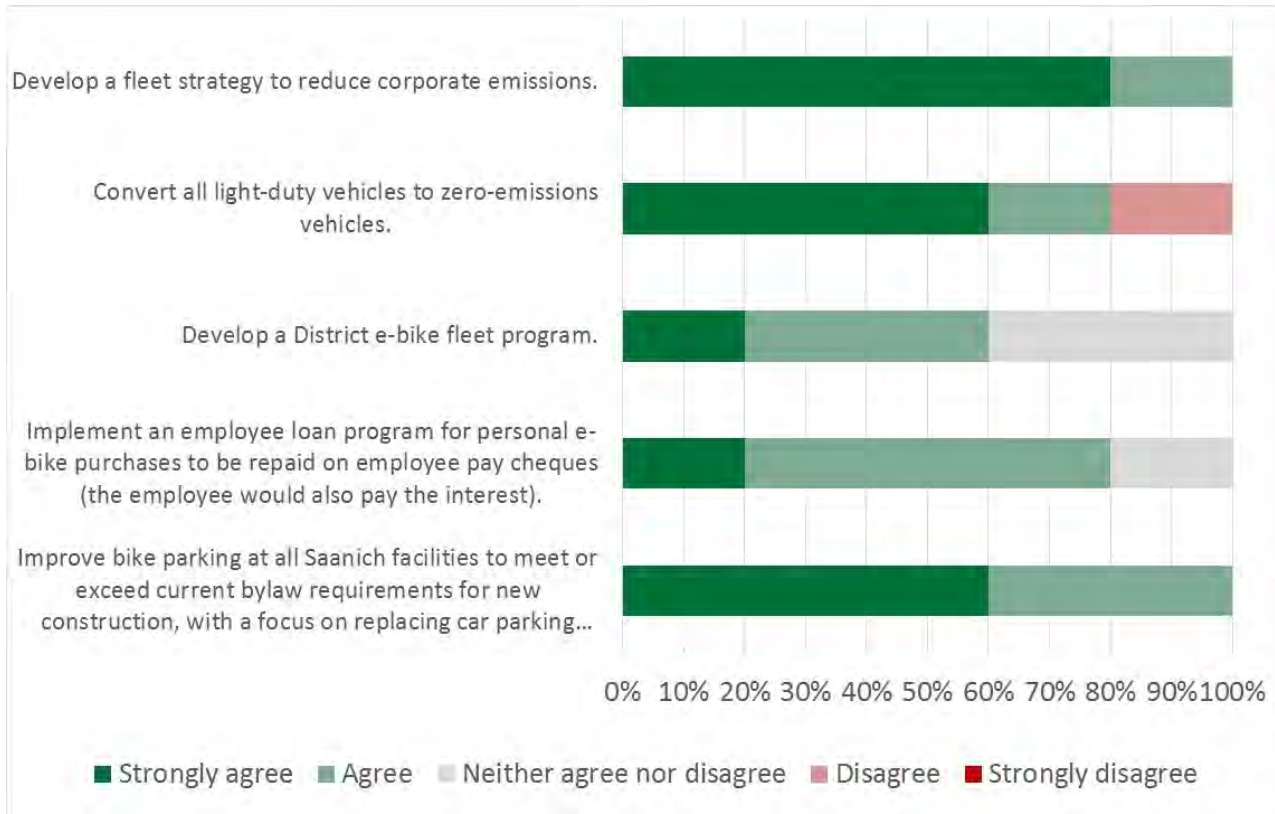


Figure 31: District leadership - Stakeholder survey responses on proposed actions



Appendix C: Stakeholder engagement details

Stakeholder organizations from several relevant sectors were sent email messages to inform them that the District of Saanich is developing an Electric Mobility Strategy and to invite them to respond to the online surveys to provide feedback on the draft strategy and proposed actions. Stakeholder organizations with members were encouraged to inform their membership about the survey and a PDF flyer and links to social media posts were provided. Table 4 lists the stakeholder organizations contacted.

Representatives of the following stakeholder organizations responded to one or both of the surveys:

- Abstract Developments
- Creatively United for the Planet Society
- Greater Victoria Chamber of Commerce
- Hansbraun Investments Ltd.
- Motorize Electric Vehicles
- Vancouver Island Strata Owner's Association
- Victoria Airport Authority
- Victoria Electric Vehicle Association
- Victoria Residential Builders Association
- Social Environmental Alliance
- Uptown Development

The Vancouver Island Strata Owner's Association, Victoria Electric Vehicle Association, and Victoria Residential Builders Association also sent follow-up emails.

Table 4: Stakeholder organizations contacted

Sector	Organization
Business owners / operators	<ul style="list-style-type: none"> Greater Victoria Chamber of Commerce Saanich Peninsula Chamber of Commerce
Car dealerships	<ul style="list-style-type: none"> New Car Dealers Association of BC
Car share organizations	<ul style="list-style-type: none"> Modo Car Share Coop Zipcar
Commercial buildings	<ul style="list-style-type: none"> Uptown Mall Hans Braun BOMA BC
Commercial drivers	<ul style="list-style-type: none"> BC Taxi Association
Cyclists	<ul style="list-style-type: none"> Bike to Work Week Greater Victoria Ubicycle Greater Victoria Cycling Coalition Women's Everyday Bicycling
Development Community	<ul style="list-style-type: none"> Real Estate Foundation of British Columbia Urban Development Institute (UDI) Vancouver Island Construction Association (VICA) Victoria Real Estate Board (VREB) Canadian Homebuilders Association (CHBA) Home Performance Stakeholder Council Victoria Residential Builders Association (VRBA)
EV owners	<ul style="list-style-type: none"> Victoria EV Club Victoria LEAF Club
Hotels / Motel Operators	<ul style="list-style-type: none"> Tourism Victoria
Large employers	<ul style="list-style-type: none"> University of Victoria Camosun College Island Health
Light industrial operators	<ul style="list-style-type: none"> Vancouver Island Technology Park
Local governments	<ul style="list-style-type: none"> Inter-municipal Working Group on Climate
Other organizations	<ul style="list-style-type: none"> South Island Prosperity Project Vancouver Island Economic Alliance BC Healthy Communities

Sector	Organization
Other transportation organizations	<ul style="list-style-type: none"> • Victoria Airport Authority • BC Ferries • ICBC • BC Transit • Victoria Transport Policy Institute
Provincial government	<ul style="list-style-type: none"> • Ministry of Energy, Mines & Petroleum Resources • Ministry of Environment - Climate Action Secretariat • Ministry of Municipal Affairs and Housing • Ministry of Transportation & Infrastructure • BC Hydro
Public transit users	<ul style="list-style-type: none"> • Better Transit Alliance of Greater Victoria
Residential MURB landowners	<ul style="list-style-type: none"> • BC Housing • Capital Region Housing Corporation • Greater Victoria Housing Society • Vancouver Island Strata Owners Association
Residents and community groups	<ul style="list-style-type: none"> • Intercultural Association / VIRCS • Community Associations (listed below)
Saanich Advisory Committees	<ul style="list-style-type: none"> • Active Transportation Advisory Committee • Environment & Natural Areas Advisory Committee • Planning, Transportation & Economic Development Advisory Committee
School Districts	<ul style="list-style-type: none"> • School District 61 • School District 63