



CORPORATION OF THE TOWNSHIP OF ESQUIMALT

Municipal Hall
1229 Esquimalt Road
Esquimalt, B.C. V9A 3P1

Legislation Text

File #: 20-410, Version: 1

REQUEST FOR DECISION

DATE: September 9, 2020

Report No. DEV-20-061

TO: Laurie Hurst, Chief Administrative Officer

FROM: Tricia deMacedo, Policy Planner and Bill Brown, Director of Development Services

SUBJECT:

Climate Emergency Report - Staff Response

RECOMMENDATION:

1. That Council authorize the Chief Administrative Officer to establish an internal Climate Working Group to make recommendations to the Senior Leadership Team on climate action strategies for the municipality;
2. That Council direct staff to prepare a report to Council on the implications of implementing the BC Step Code in the municipality;
3. That Council direct staff to prepare the necessary amendments to the Parking Bylaw, 1992, No.2011 to require electric vehicle (EV) ready construction in all new residential buildings (as detailed in Appendix A) to come into force by July 1, 2021; and
4. That Council endorse the Environmental Advisory Committee (EAC) as the official external advisory body for the Climate Action Plan.

RELEVANT POLICY:

Climate Emergency Declaration 2019
Climate Action Charter
Official Community Plan

STRATEGIC RELEVANCE:

Healthy, Livable and Diverse Community - Develop and implement strategies that reduce impact on the environment consistent with our Climate Action Charter goals.

BACKGROUND:

Enclosed with this staff report are the following appendices:

Appendix A: Recommended Electric Vehicle charging requirements for new residential construction

Appendix B: Esquimalt Climate Emergency Response Report

Appendix C: Correspondence

Appendix D: Clean BC rebates for fuel switching and retrofits

In April, 2020, Community Energy Association (CEA) presented the Climate Emergency Response Report to Council as the first step in the Climate Action Plan process (Appendix B). The report contained eight key priority actions that could be implemented to start to address the climate emergency. The understanding was that these actions could be initiated prior to completion of the full Climate Action Plan, which is not expected to be completed until winter 2020/2021.

Council's direction was to refer the report to staff and that a "staff report be prepared outlining the feasibility and cost implications associated with implementing the report's recommendations". Council also referred the report to the Environmental Advisory Committee. The report was presented to the Committee at the May 28, 2020 meeting and the Committee made the following motions:

That the Environmental Advisory Committee respectfully requests Council to task the Environmental Advisory Committee as the reviewing body for the Climate Action Plan and allow for the Environmental Advisory Committee to invite stakeholders and technical experts to participate in the review in an advisory capacity to the Committee.

That the Environmental Advisory Committee recommends that Council adopt the Climate Emergency Response Report as presented to the Committee with the consideration of the comments made in the two pieces of correspondence included with the report.

The two pieces of correspondence referred to by the EAC in their motion have been appended to this report (Appendix C). The main points summarized from this correspondence are:

- More urgency needed in timelines and budget
- GHG reduction targets are too low
- Should focus on zero carbon rather than carbon-neutral
- EV chargers should include solar and DC fast charger
- Elimination of most parking requirements is suggested
- Update terms of reference for EAC
- Consider Property Assessed Clean Energy program in the municipality.
- Update the Tree Bylaw and increase tree planting

The Senior Leadership Team has reviewed the report from CEA and has provided direction on the feasibility of the eight actions. This report is the result of that analysis. The following six recommended actions will demonstrate the commitment that Esquimalt Council has made in their Climate Emergency Declaration to reduce greenhouse gas (GHG) emissions quickly over the next decade.

1. Integrated Climate Action (Action 1 from the Climate Emergency Response Report)

The recommendation is to establish a cross-departmental Climate Action Working Group. The working group will be composed of staff with skills related to climate action. Final composition of the working group will be approved by the CAO. The Working Group will propose templates for Council Reports, updates to purchasing protocols and departmental workplans to incorporate climate action strategies to the Senior Leadership Team.

2. Prepare for Infrastructure Grants (Action 4 from the Climate Emergency Response Report)

The recommendation is to monitor Federal and Provincial funding announcements and investigate potential projects for funding applications in the areas of facility retrofits, access to public EV charging stations and resource recovery.

3. Energy Step Code (Action 5 from the Climate Emergency Response Report)

The recommendation is to review the implementation of the BC Step Code in Esquimalt. Staff will report back to Council with further details on the implications of implementing Step Code as well as timelines for the adoption of each step for various building types.

4. EV-ready Building Requirements (Action 6 from the Climate Emergency Response Report)

The recommendation is to make interim amendments to the existing Parking Bylaw to include electric vehicle infrastructure for all new residential buildings.

5. External Advisory Committee (Action 7 from the Climate Emergency Response Report)

The recommendation is to formally recognize the Environmental Advisory Committee as the external advisory body for the Climate Action.

6. Energy Retrofit Outreach (Action 8 from the Climate Emergency Response Report)

The recommendation is to continue with outreach to residents to encourage fuel switching from fossil fuels to electric heat pump through the Bring it Home 4 Climate program.

ISSUES:

1. Rationale for Selected Option (s)

Additional rationale related to climate goals and targets can be found within the Climate Emergency Response Report.

Integrated Climate Action: Currently the Senior Leadership Team (SLT) acts as the internal review body for proposed projects, plans and budgets for the Climate Action Plan. Identifying key staff members to form a Climate Working Group that could assist in this review and would oversee the implementation of the plan would assist the Senior Leadership Team with this task. The Climate Working Group would take on some of the tasks identified in the Climate Emergency Response Report and make recommendations to the SLT. There would be no additional costs other than staff time for meeting and projects. Collaboration between departments would help with the integration of climate action throughout the municipality and reduce redundancy of multiple staff working on similar projects or competing for funding. Final composition of the working group will be approved by the CAO.

Prepare for Infrastructure Grants: This action is status quo for the municipality. Staff continually review grant opportunities and apply for those which fit within priorities identified in the Strategic Plan. Moving forward, it will be important for those individual actions identified in the Climate Action Plan to become integrated into the Strategic Plan in order for climate action to become embedded into workplans.

Energy Step Code: The Energy Step Code is an optional compliance path in the BC Building code that establishes progressive energy performance requirements (steps) for new buildings, with the

highest step representing net-zero energy ready construction. Step 1 is essentially construction to the BC Building Code with an additional requirement to consult with a certified Energy Advisor to model and test the new building and make suggestions to improve the building envelope. Builders thus gain experience and knowledge about the principles of energy efficient construction. The Step Code has been optional up to this point, however beginning in 2022 the province will require all new Part 9 buildings (small residential buildings such as detached homes and duplexes) to achieve at least Step 3 and all Part 3 buildings (large residential buildings) to achieve Sept 2.

Although a previous Council considered, but did not adopt the Step Code for Esquimalt, staff recommend that Council revisit this decision in the light of the impending mandatory requirement that all residential buildings meet the Step Code by 2022. Should Council approve this recommendation, staff will report back with a suggested implementation plan for the Township that considers the implications to staff, builders and residents as well as the implications for climate mitigation.

EV-ready Building Requirements: Electric vehicle (EV) sales in BC are being supported by the Provincial and Federal government through rebate programs and annual targets for sales. The Zero Emissions Vehicle (ZEV) Act, passed in 2019, requires automakers to meet increasing annual levels of EV sales reaching 10% of new light-duty vehicle sales by 2025, 30% by 2030 and 100% by 2040. The Act is meant to ensure that automakers increase the number and type of EVs that they sell in B.C. to meet consumer demand. Already in Esquimalt we have observed the rapid uptake of EVs; the number of EVs registered to Esquimalt residents has doubled in the past year, from 136 to 282 according to ICBC data. As the provincial requirements for sales targets increases, we can expect to see many more EVs owned by Esquimalt residents. Past Esquimalt Councils have been supportive of measures to regulate EV charging capacity; at the regular Council meeting of February 27, 2017 Council made a motion to “look at options to move from ‘encouraging’ all new construction to be EVC ready, to embedding EVC infrastructure into a policy and bylaw that requires at minimum level 2 charging stations for high density developments.”

Local government can support the uptake of EVs through ensuring that EV owners have access to both public and private charging options. As most EVs are charged at home at night, one particular impediment to owning an EV is the lack of charging options in multi-family buildings. As the cost of retrofitting these parking stalls is cost-prohibitive and in the case of condo buildings with multiple owners, can be legally complicated, many local governments are now mandating 100% of residential parking stalls be supplied with the infrastructure that could support an EV charger. In most cases, builders are required to ensure the parking spaces have, at minimum, adequate electrical capacity, a dedicated circuit, and conduit run to the stall. Some local governments also require the wiring and outlet; regulations rarely require a complete charging station at each space.

Recently, both Saanich and Victoria have passed ‘EV-ready’ building requirements for new residential buildings as a zoning bylaw amendment (see table below). Esquimalt staff participated in the ‘industry engagement’ portion of Saanich’s public engagement on their strategy; builders and developers were overwhelmingly supportive of the proposed residential requirements but more concerned about commercial EV charging regulations. For this reason, staff propose to start with **residential requirements only** in the Township.

Municipality	Effective Date of Bylaw	Minimum Energized EV Outlets – Single Family	Minimum Energized EV Outlets – Multi-family	Minimum Energized EV Outlets – Commercial
Victoria	Oct 1, 2020	1 space (not required for suites or garden suites)	100%	Greater of 2 spaces or 5% of total spaces.
Saanich	Sept 1, 2020	1 space (suites 1 extra)	100%	Varies

Adopting EV-ready building requirements for new buildings is a straightforward bylaw update that Development Services staff can undertake in the short-term by using the examples from Victoria and Saanich as well as technical information prepared for the CRD. If Council agrees with the 100% EV ready requirements detailed in Appendix A, staff will bring back interim bylaw amendments to the existing Parking Bylaw, 1992, No. 2011 and any other technical information required to establish performance standards for EV charging infrastructure. Requiring capacity for sufficient charging infrastructure in new buildings can “future-proof” those buildings and ensure current and future EV drivers have plenty of places to plug in. Ensuring adequate capacity now is significantly cheaper than retrofitting parking garages later. The use of energy management systems (‘load sharing’) has been found to significantly reduce the cost of installing chargers by reducing the amount of electrical capacity required overall.

Significant work has been done on establishing the technical requirements for charging capacity, including where energy management systems are being used, by the CRD, Saanich and Victoria. Staff will be able to use this previous experience to duplicate it for the Township.

External Advisory Committee: The EAC is a natural fit for review of the Climate Action Plan documents due to its committed and informed membership, regular meeting schedule and existing feedback loop to Council. The Environmental Advisory Committee meets approximately 10 times per year and is made up of residents of Esquimalt that express interest in environmental issues or have environmental education and/or careers. A recent amendment to the Terms of Reference for the EAC allowed for an additional member to join the Committee for a one term period, specifically in order to assist with the review of climate action materials for the Township. Two representatives of the Esquimalt Climate Organizers are also members of the EAC starting in July 2020.

Energy Retrofit Outreach: Due to the number and age of residential buildings in Esquimalt, retrofitting of existing homes holds far greater potential for GHG reduction than measures aimed at new construction. In particular, Esquimalt’s GHG inventory, like other older communities on Vancouver Island, shows that oil heating accounts for a disproportionate amount of emissions compared to other fuels. CEA estimates that about 10% of Esquimalt’s GHG emissions come from oil heating, which in addition to its effect on GHGs, also has other environmental risks associated with leaking tanks. The Township has budgeted \$5000 towards rebates to ‘top up’ Clean BC and CRD grants towards the replacement of fossil fuel heating systems with an electric heat pump, starting on October 1, 2020.

Esquimalt has partnered with City Green, the CRD, and neighbouring municipalities through the Transition 2050 program to launch a pilot outreach program called ‘Bring it Home 4 the Climate’ to

encourage homeowners to fuel switch for heating and to improve the energy efficiency of their homes. Residents who enter this program are also eligible for the rebates offered through Clean BC (Appendix D). Starting October 1, 2020 Esquimalt residents will be eligible to add \$350 to the existing rebates for a potential maximum rebate of \$4700 when switching from oil or natural gas to an electric heat pump.

In order to increase uptake of this offer, staff propose to increase the amount and type of outreach to homeowners that may still be using oil as a fuel source for heating. Fire Department Records are available for historical permits to install and replace oil tanks. Staff would contact these specific homeowners with information about both proper tank maintenance and rebate programs for fuel-switching. A dedicated email oiltank@esquimalt.ca <<mailto:oiltank@esquimalt.ca>> has been created to handle communications with those residents. Communicating directly with homeowners is a potential way to increase awareness of the climate impact of oil heat and increase uptake of the program.

2. Organizational Implications

Action 1, Integrating Climate Action will require that staff on the Climate Working Group meet on a regular basis at least during the development and initial implementation of the Climate Action Plan. There is also the potential for alterations to departmental work plans and budgets as a result of climate initiatives.

As the Step Code would only apply to new buildings and only Part 9 buildings are inspected by the Senior Building Official, the implications to Building Services would be limited and would mainly involve checking third party paperwork to confirm that the home is built to the correct level of the Step Code as defined by the municipality. Staff will report back to Council later this year with further details on the implications of adopting Step Code in the Township.

The EV ready bylaw work has been established previously by other municipalities and is essentially ready to enact by adopting the same regulations as Esquimalt's neighbouring local governments. This can be managed within existing staff work time.

The energy retrofit program is being conducted already with support from Development Services. Administration of the rebates is through an agreement with Clean BC and does not impact staff resources.

3. Financial Implications

None of the recommended actions require cash contributions above the \$5000 which has already been budgeted for home retrofit rebates.

Staff at Saanich, Oak Bay and Victoria have confirmed that the costs of implementing Step Code and EV-ready new construction are minimal to the municipality. CEA has offered, using external funding, to help Esquimalt complete the required consultation with buildings to put Step Code into practice in the Township. Financial implications to the private sector for both Step Code and EV-ready new construction will be detailed more in future reports to Council that focus on these two actions.

4. Sustainability & Environmental Implications

The Climate Emergency Response Report (Appendix B) contains details on the environmental and climate implications of each action including the potential GHG reductions.

5. Communication & Engagement

Most of these actions will not require additional consultation, with the exception of Step Code, which has a provincial requirement for consultation with builders. As many of the CRD municipalities have already completed or started this consultation, Esquimalt will not need to make this consultation extensive. Community Energy Association has offered to help Esquimalt with this requirement through alternate program funding.

Public engagement is a critical piece of all climate action initiatives. Updating Township website and social media with information on any of these actions can be done as part of regular business. Additional notice regarding amendments to the Parking Bylaw will occur as a courtesy to the development community but a public hearing is not required for these amendments.

ALTERNATIVES:

1. That Council authorize the Chief Administrative Officer to establish the formation of an internal Climate Working Group to make recommendations to the Senior Leadership Team on strategies for climate action in the municipality;
That Council direct staff to prepare a report to Council on the implications of implementing the BC Step Code in the municipality;
That Council direct staff to prepare the necessary amendments to the Parking Bylaw, 1992, No.2011 to require electric vehicle (EV) ready construction in all new residential buildings (as detailed in Appendix A) into force by July 1, 2021; and
That Council endorse the Environmental Advisory Committee (EAC) as the official external advisory body for the Climate Action Plan.
2. That Council provide staff with alternative direction.