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City Staff Report

Report Date: August 07, 2020**Meeting Date:** August 25, 2020**To:** City Manager**From:** Carbon Review Coordinator**Subject:** Zero-Emission Vehicle (ZEV) Awareness Initiative from Natural Resources Canada is a funding opportunity to add a long range electric SUV to City of Quesnel fleet.

Purpose

The purpose of this report is to highlight the current funding opportunity through Natural Resources Canada's Zero-Emissions Vehicle Awareness program. This program may cover 50% of costs up to \$50,000 for initiatives that encourage the adoption and awareness of Zero-Emissions vehicles.

Summary

- On October 4th, 2019 the Quesnel City Council approved new emission reduction targets for the community of Quesnel as well as for City corporate operations to address the challenge of climate change.
- Transportation is the greatest contributor of greenhouse gas emissions in our community (57% of community footprint) and within City corporate operations (69% of the City carbon footprint).
- Highlighting the capability, desirable aspects, and lower cost of driving that electric vehicles provide will be key to encouraging the adoption of electric vehicles in our northern community and meeting reduction goals established by Council.
- Funding is currently available through Natural Resources Canada's Zero-Emissions Vehicle Awareness program for 50% of the cost of a project up to \$50,000. The matching funds must be shown to be secure in order to make an application to NRCan for the matching funding.
- Replacing a Bylaw Services vehicle one year early for an electric SUV to showcase and promote would meet the goals of the NRCan program and bolster our local commitments to emission reductions and leading by example with climate actions.

Recommendation

THAT Council approves the submission of an application to the Zero-Emissions Vehicle Awareness program through Natural Resources Canada to purchase and promote an electric SUV for use in the Bylaw Services fleet;

AND THAT Council approves the use of City funds up to \$27,500 from the equipment replacement reserve to provide 50% of the project cost to purchase and showcase an electric SUV for use by Bylaw Services.

Statutory Requirements

The B.C. Climate Action Charter is a voluntary agreement between the B.C. government, Union of B.C. Municipalities and each local government signatory to take action on climate change. Under the Charter, local government signatories commit to take actions to become carbon neutral in their corporate operations and reduce community-wide emissions by creating more complete, compact and energy efficient rural and urban communities. As a signatory to the BC Climate Action Charter the City of Quesnel



has agreed that reducing emissions will generate environmental and health benefits for individuals, families, and communities AND that governments urgently need to implement effective measures to reduce GHG emissions.

Council Policy

The Official Community Plan (OCP) for Quesnel has been updated to reflect the new GHG emissions reduction targets approved by City Council October 4th 2019.

Council's policies are as follows:

- The City's corporate emissions reduction target is 3.5% annually for the years 2020, 2021 and 2022.
- Reduce community emissions from 2007 levels 40% by 2030, 60% by 2040, and 80% by 2050.

The City's Vehicle Replacement Policy CF-12, states that the City will continually be looking at options to take advantage of newer technologies and fuel saving options to reduce the City's greenhouse gas emissions when purchasing fleet vehicles.

Financial Implications

If the funding request from NRCan is successful it would mean that the City would be replacing a City Bylaw Services vehicle one year in advance of scheduled replacement with an electric SUV. The 2012 Bylaw vehicle was scheduled to be replaced in the 10 year capital fleet plan for \$36,016 in 2022 based on the City's Vehicle Replacement Policy CF -12 which notes SUV's are to be replaced after 10 years. The total funding required for early replacement for an electric option would include the purchase of the vehicle (\$49,846), electric car charger and installation (\$3,000), on vehicle and printed/online promotion (\$2,154) for a total of \$55,000. NRCan's Zero-Emission Vehicle (ZEV) Awareness Initiative will cover 50% of the costs up to \$50,000.

Therefore, if successful in applying to NRCan the financial implications to the City would be \$27,500. This would mean an expenditure of funds a year earlier than planned but would require \$8,516 less (\$36,016-\$27,500) for adding a much more valuable and less polluting vehicle to the City fleet.

There may be a higher residual value achieved in selling the Bylaw Services vehicle one year early but the capital expense for replacement was not planned for another year and therefore has budget implications to be considered. If the funding request to NRCan is not successful then no financial commitment is required and the planned schedule for the Bylaw Services vehicle replacement would remain as planned.

Background

The Government of Canada remains steadfast in its conviction that the electrification of transportation is key to decarbonizing the sector, transitioning to a low-carbon future and achieving our target of net zero emissions by 2050. Natural Resources Canada supports the effort to transition transportation to lower-carbon options by delivering initiatives designed to increase awareness, availability and use of lower-carbon transportation options.

Buying a vehicle is one of the largest financial decisions that Canadians make. Broad uptake of ZEVs will require transformative societal change and concerted government efforts to address critical impediments. The lack of consumer awareness of ZEVs is one of the key barriers to adoption on a wider scale. Given that ZEVs are fuelled and maintained differently, consumers need to be sensitized to how they work, and have proof that a ZEV can provide an equal or better driving experience and value, compared to a conventional vehicle. Addressing consumers' awareness needs is critical in order to move Canadians through the consumer continuum to ZEV adoption.



To address these challenges, Natural Resources Canada's Zero-Emission Vehicle Awareness Initiative supports projects that aim to increase awareness of ZEVs, and public charging and refueling infrastructure, through education and capacity-building activities to ultimately support a greater adoption of ZEVs by Canadians. This call seeks proposals for projects that aim to address awareness and knowledge gaps among Canadians on ZEV technologies. This funding will be delivered through cost-sharing, non-repayable contribution agreements for eligible projects. The maximum contribution amount payable per project will not exceed \$50,000. The Initiative will pay up to 50% of total project costs. All projects must be completed no later than March 31, 2021.

The purchase of a long range electric SUV for use by Bylaw Services would have many benefits to the City of Quesnel. As a highly used and very visible vehicle the exposure possible of the new Bylaw Services electric SUV would be greater than any other department could provide. Bylaw Services travels throughout the City but maintains a strong presence in the downtown core. Replacing a fleet SUV with an electric option will have considerable emissions and costs savings at about 1/5 per kilometer. As this is only one vehicle it will not itself result in any climate reduction goals but the idea is to show our local community and staff that these vehicle are much cheaper to drive and maintain, are extremely capable in snow, and are quiet and easy to drive. We will market this vehicle as a trial for City operations but also as a trial vehicle for community members in general.

The electric option best suited for the needs of the City and Bylaw Services is the Hyundai Kona Electric SUV. This vehicle may need to be serviced and maintained in Prince George but electric cars require less maintenance on average than internal combustion engine vehicles. With fewer moving parts, no need for oil changes, and additional technology to diagnose needed repairs the cost of traveling to Prince George should be offset by the reduced maintenance schedule. Hyundai may also allow local Quesnel service technicians to do some of the regular maintenance needed to ensure the warranty conditions are followed. The first service (12,000 kms) contains nothing more than a traditional internal combustion engine would receive: Tire rotation, check fluid levels, inspect lights, inspect tire pressure, inspect steering gear box, linkages and boots/ball joints, and inspect driveshafts and boots.

An electric car is also expected to last beyond ten years, the time currently scheduled to replace internal combustion engine SUVs within the City fleet. The Kona electric SUV will be able to travel to Prince George and back to Quesnel and still have 171km of range left from a full charge. The day to day use and possible trips to Prince George will be an ideal trial of this electric vehicle. We can then share the results and encourage the adoption for those these vehicles suit the most.

The addition of an electric car charger to the City Hall parking lot will also help promote the use of electric cars. The standard car charger will be suitable for all electric cars – so if guests of City Hall need a charge they can do so. We can also add the charger to the Plugshare website to ensure those who already own electric cars know we are now open to their business also.

Options

- Approve the recommendations to apply to NRCan for 50% funding for an electric SUV for Bylaw Services Fleet and to secure City funding for the remaining 50% partner portion required to apply.
- Seek specific changes to the planned electric vehicle option or department of use proposed before submitting an application to NRCan for 50% funding.
- Deny the recommendations to apply to NRCan for funding and to secure City funding to replace a Bylaw Services vehicle one year in advance.