



City of Richmond

Report to Committee

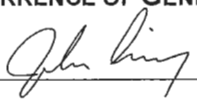


To: Public Works and Transportation Committee **Date:** June 7, 2021
From: Suzanne Bycraft
Interim Director, Public Works Operations **File:** 02-0780-01/2021-Vol
01
Re: Electric Vehicle Adoption - Youth Outreach Initiative

Staff Recommendation

That the report titled 'Electric Vehicle Adoption - Youth Outreach Initiative', from the Interim Director, Public Works Operations, dated June 7, 2021, be received for information.

Suzanne Bycraft
Interim Director, Public Works Operations

Att. 1

REPORT CONCURRENCE		
ROUTED TO:	CONCURRENCE	CONCURRENCE OF GENERAL MANAGER
Communications	<input checked="" type="checkbox"/>	
Community Social Development	<input checked="" type="checkbox"/>	
Sustainability and District Energy	<input checked="" type="checkbox"/>	
SENIOR STAFF REPORT REVIEW	INITIALS: 	APPROVED BY CAO 

Staff Report

Origin

This report presents information on a community outreach initiative designed to promote electric vehicle awareness among youth. During 2020, the City applied and was awarded funding in the amount of \$10,000 from Emotive's Community Outreach Incentive Program. The purpose of this program is to create awareness and alignment with the provincial Zero-Emissions Vehicle (ZEV) Act, which requires that automakers sell or lease only 100% ZEVs by 2040. By helping to promote awareness among youth, the City is not only furthering its own Green Fleet Action and Community Energy and Emissions (CEEP) plan objectives, but is also helping to lead broader community ZEV adoption.

This report supports Council's Strategic Plan 2018-2022 Strategy #2 A Sustainable and Environmentally Conscious City:

Environmentally conscious decision-making that demonstrates leadership in implementing innovative, sustainable practices and supports the City's unique biodiversity and island ecology.

2.1 Continued leadership in addressing climate change and promoting circular economic principles.

This report supports Council's Strategic Plan 2018-2022 Strategy #8 An Engaged and Informed Community:

Ensure that the citizenry of Richmond is well-informed and engaged about City business and decision-making.

8.1 Increased opportunities for public engagement.

Analysis

In 2019, the Province of British Columbia passed the Zero-Emission Vehicles Act (ZEV Act). The ZEV Act requires automakers to meet an escalating percentage of new light-duty ZEV sales and leases, reaching:

- 10% of light-duty vehicle sales by 2025;
- 30% by 2030; and
- 100% by 2040.

The City's Green Fleet Action plan guides corporate actions to ensure alignment with these regulations, including the acquisition of ZEVs to reduce fleet-related emissions. Electric vehicle charging stations continue to be installed to encourage broader community electric vehicle adoption. Council endorsed the CEEP Strategic Directions in January 2020; the Directions will guide the development of more specific actions in the revised 2020-2050 CEEP. Strategic Direction 3 - Transition to Zero Emission Vehicles aims to foster electric mobility, with expanded options for charging personal electric vehicles, electric car share vehicles, e-bicycles,

and e-scooters at home, at work and on-the-go. As part of the early stages in the CEEP public engagement program, staff aimed to reach youth and families throughout the community to raise awareness and obtain feedback by participating in community events through the summer of 2019. Youth engagement is an opportunity to create awareness and demonstrate leadership to position the community for further advancing ZEV adoption.

Community Outreach Initiative

Emotive Community Outreach Incentive Program

The Emotive Community Outreach Initiative (COIP) is a component of the provincial CleanBC Go Electric Program and is managed by Plug-In BC. This is the second time the City has received funding through this program. The first was \$8,000 in 2018, which was used to promote electric vehicles and charging infrastructure through outreach programs. The campaign consisted of information booths at a variety of local public events, including the Richmond World Festival as well as free public workshops. With the \$10,000 received in 2020 and an increased focus on raising awareness among youth, staff undertook development of this initiative with the involvement of the City Green Ambassadors with a keen interest in electric vehicles and who had previously been involved with City EV outreach events. Plug-In BC, Plug-In Richmond and the Richmond School District were also partners in the development of this outreach initiative.

COIP Program Overview

The concept of designing a youth awareness initiative with youth involvement helped to frame a unique and engaging approach. The involvement of Plug-In BC helped to ensure the messaging remained on target with broader provincial ZEV regulations and, most importantly, the Richmond School District's involvement helped to design a program that would be aligned with standard school curriculum approaches. The outreach program, known as the "Richmond EVie Lesson Toolkit", includes the following components:

1. A uniquely City-designed mascot appropriately named "EVie", including EVie emojis.
2. An engaging 60 second video to introduce the concept of EVs and how they may be connected in future. (Video link: <https://vimeo.com/536454214> and password: COR)
3. For younger students, a lesson plan for kindergarten to grade 7 which includes colouring and activity pages.
4. For older students, a lesson plan designed for grades 8 to 12 including a presentation slide deck.
5. Creative components, including a design challenge or short video challenge, where students can design their own views of what transportation may look like in 2050. Winning entries will be featured on Emotive's social media platforms.

Teachers can use the Richmond EVie Lesson Toolkit in their classrooms in whole or in part, as best suited to their teaching agendas.

A story-board image of the different EVie Lesson Toolkit components is included as Attachment 1 for reference.

Due to COVID-19, this program was created entirely through virtual meetings between November 2020 and April 2021 involving more than 11 planning sessions and numerous virtual meetings with teachers and internal City staff. The Green Ambassador volunteers donated 350 hours during this period to help design the program.

COIP Program Roll Out

Staff are working with the Richmond School District to launch the EVie Lesson Toolkit starting in June 2021 in preparation for program roll out starting in September 2021. The roll out will involve letters being sent to the Richmond School District teachers inviting them to teach all or portions of the program. Staff and the Green Ambassadors involved in the program will be available for virtual presentations to guide teachers through all the program elements. The toolkit will be available for teachers in Richmond to access through Plug-In BC's website. Teachers will be invited to complete evaluations of the program through Let's Talk Richmond and feedback can be used to revise and improve the toolkit.

The involvement of the various partners described in this initiative has led to considerable interest in the uniqueness of the approach. The program was designed with the following in mind:

- Execute a youth-led design;
- Design with Richmond School District involvement to follow standard school curriculum;
- Design with provincial involvement via Plug-In BC; and
- Deliver an easily replicable program for other school districts throughout the province and nationally.

The intent is to first offer the program in a beta-testing platform to Richmond School District teachers. Their experiences and feedback will help guide any future program delivery and expansion. Representatives of Emotive COIP and the Provincial Ministry of Energy, Mines and Low Carbon Innovation have expressed an interest to expand this initiative, and these opportunities will be explored at a later date pending the outcome of beta-testing.

Financial Impact

The City received a \$10,000 grant from Emotive's Community Outreach Incentive Program. The project was developed within this funding allocation, along with City staff time, Green Ambassador volunteer hours and in-kind professional advice from teaching professionals, Plug-In BC and Plug-In Richmond.

Conclusion

This report provides an overview of the EVie Lesson Toolkit, a multi-pronged curriculum-based teaching initiative designed to raise awareness of electric vehicles among youth. The toolkit is being offered to teachers in the Richmond School District to beta-test and provide feedback for review and refinement. Early indications are that this unique approach to youth outreach could result in this made-in-Richmond teaching toolkit being shared with others in the regional district, and potentially expand provincially and beyond.

June 7, 2021

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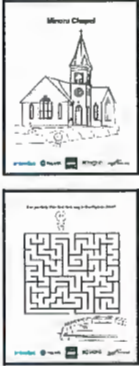




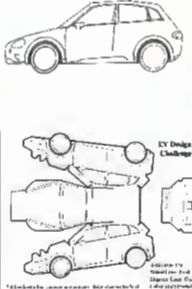


A handwritten signature in blue ink, appearing to read 'S. Bycraft', enclosed in a light gray rectangular box.

Suzanne Bycraft
Interim Director, Public Works Operations
(604-233-3338)

SB:jk

Att. 1: EVie Lesson Toolkit – Story Board Image

EVie Lesson Toolkit – Story Board Image
 Proposed Website: www.pluginbc.ca/RELT

<p><u>Introductory Video</u> Password COR</p>  <p>Mascot EVie</p>  <p>EVie Emojis</p> 	<p>Lesson Plan K-7</p>  <p>Lesson Plan Grades K to 7</p> <p>Colouring & Activity Sheets</p> 	<p>Lesson Plan 8-12</p>  <p>Lesson Plan Grades 8 to 12</p> <p>Slide Deck</p>  <p>Richmond Charging Stations Map</p> 	<p>Challenge EV Design*</p>  <p>DESIGN CHALLENGE</p> <p>Car Templates</p> 	<p>Challenge Short Video*</p>  <p>SHORT VIDEO CHALLENGE</p> <p>Sample Video</p> 
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