

DATE OF MEETING | FEBRUARY 19, 2020 |

AUTHORED BY | ROB LAWRENCE, ENVIRONMENTAL PLANNER |

**SUBJECT                    CLEANBC BETTER HOMES REBATE PROGRAM**

## **OVERVIEW**

### **Purpose of Report**

| To obtain Council approval to participate in the CleanBC Better Homes Rebate Program. |

### **Recommendation**

That the Finance and Audit Committee recommend that Council:

1. Direct Staff to coordinate with the Province of BC and participate in the CleanBC Better Homes Rebate Program; and,
2. Direct Staff to add \$100,000 to the 2020-2024 Financial Plan for the participation in the Province of BC CleanBC Better Homes Rebate Program with funding coming from the Emissions Reduction Reserve Fund.

## **BACKGROUND**

| On 2019-APR-29, recognizing the global concern raised by the International Panel on Climate Change (IPCC) to limit global warming to 1.5°C, Council declared a Climate Emergency and required that new community-wide emission reduction targets be set to 50% of 2010 levels by 2030, and net zero by 2050.

Staff are currently working on updating the City of Nanaimo Corporate Climate Change Plan (2007), and the Community Sustainability Action Plan (2012). Both plans set emission reduction targets and identify a range of actions to lower corporate and community-wide emissions.

Staff see an opportunity to accelerate the City implementation of its Climate Emergency Declaration by participating in the CleanBC Better Homes Rebate Program, beginning in April 2020.

The CleanBC Better Homes Rebate Program is a program coordinated by the Province of BC and intends to help accelerate home energy retrofits and reduce energy use by providing incentives for high efficiency heating equipment and building envelope improvements. Both BC Hydro and Fortis BC are also offering support and incentive funding as part of the program.

Municipalities that agree to participate in providing rebate top-ups are asked to sign an agreement with the Province to participate in the program by March 1<sup>st</sup> 2020. |

## **DISCUSSION**

While current building standards are more energy efficient than in the past and will become more so as the BC Energy Step Code is implemented; the current building stock includes a range of less energy efficient heating systems that use more carbon intense fuels, like heating oil, propane and natural gas. Based on 2007 GHG emissions estimates for Nanaimo, residential buildings emit 16% of all GHG emissions in the City. This makes it the second largest source of GHG emissions after transportation, which emits up to 70% of GHGs in the City.

While the Province, BC Hydro and Fortis BC will be offering rebates on various home retrofit improvements under the Program, municipalities have the opportunity to add additional top-up rebates in their communities to encourage further uptake on fuel switching to electric heat pumps and EnerGuide assessment rebates. (See Attachment A on all rebates available).

When reviewing provincial data on emission levels from residential heating and cooling, there are opportunities to encourage energy switching, in particular heating oil, which has seen a slight downturn in its use in Nanaimo. By switching to an air source heat pump, homes with oil heating could lower their GHG emissions by up to 89 tons per year (Province of BC, 2020).

| Community Greenhouse Gas Direct Emissions (Residential) in Nanaimo* |                                   |                                   |                                   |                                   |
|---|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|
|   | 2007<br>GHGs (tCO <sub>2</sub> e) | 2010<br>GHGs (tCO <sub>2</sub> e) | 2012<br>GHGs (tCO <sub>2</sub> e) | 2017<br>GHGs (tCO <sub>2</sub> e) |
| Natural Gas (GJ)  | 37,941                            | 35,246                            | 37,269                            | 45,450                            |
| Propane (Litres)  | 3,846                             | 3,723                             | 3,842                             | 3,803                             |
| Wood  | 8,318                             | 8,052                             | 8,310                             | 8,224                             |
| Heating Oil (Litres)  | 24,910                            | 24,114                            | 24,885                            | 22,403                            |
| <b>TOTAL</b>  | <b>75,015</b>                     | <b>71,135</b>                     | <b>84,306</b>                     | <b>79,880</b>                     |

\*- Using stationary fuel consumption data available from the Provincial CEEI website (<https://www2.gov.bc.ca/gov/content/environment/climate-change/data/provincial-inventory>)

## **Available Municipal Top-Ups**

### **Fuel Switch Heat Pump**

The Fuel Switch Heat Pump Top-up is an additional rebate for participants that switch from a fossil fuel (oil, natural gas, or propane) heating system to an electric air-source heat pump. Municipalities can commit to a \$350 or \$2,000 top-up. Participants either can install a fully electric heat pump system, or install a dual-fuel heat pump system with back up fossil fuel heating (i.e. a furnace). The municipal top-up would be in addition to \$3,000 Heat Pump rebates currently available through the province, under the CleanBC Better Homes Rebate Program.

### **Electric Service Upgrade**

The Electric Service Upgrade Top-up is an additional rebate of \$500 for participants upgrading their electrical service to 100, 200 or 400 amp service, and switching from a fossil fuel (oil, natural gas, or propane) space, or a water heating system to an electric air-source heat pump or heat pump water heater. This municipal top-up offer is in addition to the heat pump and electric service upgrade rebates currently available through the CleanBC Better Homes Rebate Program.

### Heat Pump Water Heater

The Heat Pump Water Heater Top-up is a \$350 or \$1,000 top-up available for participants that switch from a fossil fuel (oil, natural gas, or propane) water heating system to an electric heat pump water heater. This municipal top-up offer is in addition to the \$1,000 heat pump water heater rebate currently available through the CleanBC Better Homes Rebate Program.

### Contractor Participation Incentive

The Contractor Participation Incentive is a \$50 or \$300 top-up available to the contractor for installing a qualifying heat pump for space or domestic hot water heating in homes that are fuel switching from natural gas, oil, or propane. Contractors are a key stakeholder in the rebate process; 60% of rebate applicants hear about the program from their contractor. The contractor also supports homeowners with required paperwork and the application process. This municipal top-up offer is in addition to the \$50 Contractor Participation Incentive currently available through the CleanBC Better Homes Rebate Program.

### EnerGuide Home Evaluation

The City of Nanaimo currently has an EnerGuide Home Evaluation Rebate that receives funds as part of the City's BC Energy Step Code Strategy. By coordinating the EnerGuide Rebate through the CleanBC Better Homes Rebate Program, an additional \$300 rebate would be available from the province to help covers costs of a home energy evaluation.

Staff propose the City offer the electrical service upgrade, contractor participation incentive and the \$350 top-up for homeowners who switch from a fossil fuel heating system to an air-source heat pump. The following table outlines the CleanBC Better Homes Rebate Program top-ups with options that a municipality can choose to offer. The proposed options for Nanaimo are highlighted at the bottom of the table.

The City currently has an Energuide Home Energy Assessment Rebate. By including it under the CleanBC program, the funding provided by the City will be matched by the Province to complete a Home Energy Assessment.

| CleanBC Better Homes Rebate Program:<br>Current Municipal Participants and Top-Ups, including proposed Top-Up for Nanaimo |   |                          |  |  |                                  |
|---|---|--------------------------|--|--|----------------------------------|
| Municipality  | Electric Heat Pump<br>Option1 / Option 2<br>\$350 / \$2,000 | Electric Service Upgrade | Electric Heat Pump Water Heater<br>Option1 / Option 2<br>\$350 / \$1,000 | Contractor Participation Incentive<br>Option1 / Option 2<br>\$50 / \$300 | EnerGuide Home Energy Assessment |
| Victoria  | \$350   |                          |  |  |                                  |
| Saanich   | \$350   | \$500                    | \$350  |  | \$150                            |
| Campbell River  | \$350   |                          |  |  | \$150                            |
| Kamloops  |   |                          |  |  | \$150                            |
| Kelowna   |   |                          |  |  | \$150                            |
| North Vancouver   | \$2000  | \$500                    | \$1000   |  |                                  |
| Richmond  |   |                          |  |  | \$150                            |
| <b>Nanaimo</b>  | <b>\$350</b>  | <b>\$500</b>             | <b>\$350</b>   | <b>\$50</b>  | <b>\$150</b>                     |

A homeowner in Nanaimo that applies for a CleanBC Better Homes Rebate Program can receive up to \$4,300 in rebates from the Province, as well as, up to \$1,350 in top-ups from the municipality, for a total rebate of \$5,650. When considering that the average cost from past participation in the CleanBC program for installing an air-source heat pump on Vancouver Island is \$11,398, the program could offer significant rebates on the final installation costs, depending on the rebates chosen by the homeowner.

Staff recommend that \$100,000 be available from the City of Nanaimo Emission Reduction Reserve Fund for Municipal Top-Ups, as laid out above. The province would administer the program and report to the City quarterly on the program uptake. Once the municipal funds are used, the municipal top-up will be withdrawn from the program, but the provincial offers will continue until 2022. |

## **OPTIONS**

1. That the Finance and Audit Committee recommend that Council:

- a) Direct Staff to coordinate with the Province of BC and participate in the CleanBC Better Homes Rebate Program; and,
- b) Direct Staff to add \$100,000 to the 2020-2024 Financial Plan for the participation in the Province of BC CleanBC Better Homes Rebate Program with funding coming from the Emissions Reduction Reserve Fund

- The advantages of this option: Action is to reduce community-wide GHGs and address the Climate Emergency Declaration. City funding is being leveraged with Provincial funding to help increase the rebate impact and encourage program uptake.
- The disadvantages of this option: The City will not have direct control on how the rebates are allocated. The Province will administer the program and later invoice the City for its top-up contribution.
- Financial Implications: The current balance of the Emission Reduction Reserve Fund is \$444,863. Approximately 22% of the funds will be allocated to this program.

2. That the Finance and Audit Committee not recommend that Council:

- c) Direct Staff to coordinate with the Province of BC and participate in the CleanBC Better Homes Rebate Program; and,
- d) Direct Staff to release \$100,000 in funds from the “Emission Reduction Reserve Fund Bylaw 2019 No. 7298” to participate in the program until February 2022.

- The advantages of this option: Allow for funding to be available for other climate action initiatives that may be a higher impact on GHG reduction per dollar.
- The disadvantages of this option: The City loses an opportunity to collaborate with the province and demonstrate climate action leadership.
- Financial Implications: The current balance of the Emissions Reduction Reserve Fund is \$444,863. Funding will remain for other uses. |

**SUMMARY POINTS**

- CleanBC Better Homes Rebate Program is a program coordinated by the Province of BC and intends to help accelerate home energy retrofits and reduce energy use by providing incentives for high efficiency heating equipment and building envelope improvements.
- Staff see an opportunity to accelerate the City implementation of its Climate Emergency Declaration by participating in the CleanBC Better Homes Rebate Program, beginning in April 2020

**ATTACHMENTS:**

Attachment A - CleanBC Better Homes Heating and Upgrade Rebates Chart

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