



City of Richmond

Report to Committee

To: Public Works and Transportation Committee

Date: March 3, 2014

From: John Irving, P.Eng. MPA
Director, Engineering

File: 10-6650-01/2014-Vol
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Re: **Clothes Washer Rebate Program**

Staff Recommendation

That:

1. the City partners with BC Hydro for a combined rebate program in May and October, 2014, which provides a minimum \$100 and maximum \$200 rebate (equally shared between BC Hydro and the City) for the replacement of an efficient clothes washer;
2. the scope of the existing toilet rebate program be expanded to include clothes washer rebates; and
3. the CAO and General Manager, Engineering and Public Works, be authorized to enter into an agreement with BC Hydro to execute this program.

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REPORT CONCURRENCE		
ROUTED TO: Finance Division Water Services	CONCURRENCE <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	CONCURRENCE OF GENERAL MANAGER
REVIEWED BY STAFF REPORT / AGENDA REVIEW SUBCOMMITTEE	INITIALS: 	APPROVED BY CAO

Staff Report

Origin

BC Hydro is offering local governments an opportunity to participate in a combined rebate offer to promote the purchase of energy- and water-efficient clothes washers.

The program supports the 2041 Official Community Plan (OCP), the Corporate Sustainability Framework, as well as the 2014 Community Energy and Emissions Plan, which includes “promoting building efficiency through outreach and education and providing incentives for building retrofit action.”

This report provides information on the program for Council’s consideration.

Analysis

BC Hydro and local governments across the province have an interest in encouraging the conservation of energy and water. Through PowerSmart, BC Hydro offers a variety of incentive programs that encourage uptake of energy-efficient technologies, including energy-efficient appliances.

The City has water demand management programs, including the Toilet Rebate Program and Rain Barrel Program, with the purpose of reducing water consumption and deferring, reducing, or eliminating the need for infrastructure capacity upgrading. In addition, the OCP includes objectives to pursue water demand management strategies, continue water conservation initiatives, and support broad-base community greenhouse gas emissions (GHG) emission reduction, as part of providing sustainable infrastructure and resources, and climate change mitigation.

There is an opportunity to combine BC Hydro’s and the City’s initiatives and offer residents a joint rebate program for fixtures that generate both electrical and water savings (i.e. clothes washers). A joint program would increase overall participation rates, reduce the amount of energy and water residents consume, save residents money, and reduce GHG emissions.

Program Details

Dates:

The proposed program offered by BC Hydro will be applicable May 1 to 31 and October 1 to 31 of this year.

Rebate Amount:

For the May campaign, BC Hydro is offering a two-tiered incentive, where either a \$50 or \$100 rebate is provided depending on the energy and water consumption rating of the clothes washer. Staff recommend that the City partners with BC Hydro and contribute matching rebates of \$50 and \$100.

Estimated Savings

Clothes washers rank second in indoor water use (after toilets), accounting for approximately 21% of indoor household water consumption. Table 1 outlines the estimated annual reduction in electrical consumption, water consumption, and GHG per clothes washer replacement. Electrical savings are mainly due to reduced hot water use. The \$100 rebate would be offered to clothes washers with a minimum modified energy factor (MEF) of 2.6 and maximum water factor (WF) of 4.0; the \$200 rebate would be offered to clothes washers with a minimum MEF of 2.8 and WF of 4.0. MEF and WF are the energy and water performance metrics for clothes washers.

Table 1. Estimated Energy, Water, and GHG Savings

Total Rebate Amount	City Contribution	BC Hydro Contribution	Electricity Savings	Water Savings	GHG Savings
\$100	\$50	\$50	139 kWh/year	62,000 litres/year	0.04 tCO ₂ e/year
\$200	\$100	\$100	240 kWh/year	62,000 litres/year	0.07 tCO ₂ e/year

Program Funding

The scope of the existing toilet rebate account could be expanded to include clothes washer rebates. The budget of the existing toilet rebate account is \$100,000, which Staff anticipate will be sufficient to fund both rebate programs, given year-to-date participation levels. So far this year, 134 toilet rebates have been issued, and the projected toilet rebate expenditures for 2014 is approximately \$80,000. As a result, it is anticipated that there will be approximately \$20,000 available, which would allow for approximately 250 clothes washer rebates.

The City of Abbotsford and District of Mission are the only other municipalities in the lower mainland that have participated in this partnership program with BC Hydro. Abbotsford and Mission started their program in 2011, and have received an average of 75 applications per month. As the proposed program for Richmond would only be offered for two months (May and October), it is anticipated that the funding available in the toilet rebate account would be sufficient to fund the rebates.

The City’s agreement with BC Hydro would stipulate the maximum level of City contribution at \$20,000. As with the past administration of the Toilet Rebate Program, Staff will monitor participation levels and report back to Council with any revised funding level recommendations.

Roles and Responsibilities

City and BC Hydro roles and responsibilities are outlined in Table 2. BC Hydro would be responsible for carrying out program administration and associated activities, and the City would

be responsible for providing funding to supplement the BC Hydro rebate and advertising the rebate program within Richmond.

Table 2. City and BC Hydro Roles and Responsibilities

City of Richmond	BC Hydro
<ul style="list-style-type: none"> • Provide funding to supplement the existing BC Hydro rebate • Advertise the rebate offer locally 	<ul style="list-style-type: none"> • Answer email and phone inquiries about the program • Receive and process online applications • Verify applicants' eligibility, as determined by the City • Provide rebate directly to applicants, and invoice the City for its portion

Financial Impact

Staff recommend that the rebates be funded from the approved Toilet Rebate Program. BC Hydro will cover all costs associated with program administration.

Conclusion

The City has an opportunity to partner with BC Hydro in providing rebate incentives to residents for purchasing efficient clothes washers. BC Hydro would be responsible for administering the rebates, which would be offered for May and October of this year. Staff recommend that the City participates in this combined rebate program that provides a minimum \$100 and maximum \$200 rebate (equally shared between BC Hydro and the City), and that the scope of the existing toilet rebate account be expanded to include clothes washer rebates.



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