

**REPORT TO ENVIRONMENTAL SERVICES COMMITTEE
MEETING OF WEDNESDAY, SEPTEMBER 29, 2021**

SUBJECT **Capital Region Energy Retrofit – Business Case**

ISSUE SUMMARY

To provide results of the Capital Region Residential Energy Retrofit Program Business Case.

BACKGROUND

On October 28, 2020, the Capital Regional District (CRD) Board directed staff to pursue completion of a detailed business case for a Regional Energy Retrofit Program and report back in 2021 with 2022 budget implications. At the same time, as part of the 2019-2021 Transition 2050 Residential Retrofit Acceleration Project, the CRD launched the pilot Bring It Home 4 Climate program to support homeowners to overcome barriers associated with home retrofits. Between August 2020 and August 2021, with very little marketing, the program has engaged over 400 homeowners and supported over 100 homeowners with a virtual home energy check-up. Staff have leveraged this, and previous work, to secure Community Efficiency Financing program funding from the Federation of Canadian Municipalities to complete an in-depth design study of a full-scale municipal residential retrofit program. As part of that work, staff have delivered a Capital Region Residential Energy Retrofit Business Case (Appendix A) that offers costs and a design framework for achieving the emission reduction goals associated with the residential built environment.

The business case recommends a regionally coordinated, subsidized and well-marketed program following a “One Stop Shop” model, with an initial focus on Part 9 (i.e., single family homes, duplexes and townhomes). The Program would build on the CRD’s Bring it Home 4 Climate program to provide turnkey service to homeowners via a Retrofit Coordinator, operated by a third-party administrator, similar to the provincial programs. The Retrofit Coordinator scope of work is found on page 6 of Appendix A.

ALTERNATIVES

Alternative 1

The Environmental Services Committee recommends to the Capital Regional District Board:

That the Capital Region Energy Retrofit – Business Case be received for information and that implementation be considered as part of the Climate Action 2022 Service Planning Process.

Alternative 2

That staff report back to the committee with further information.

IMPLICATIONS

Environmental & Climate Implications

The business case estimates that the proposed budget would enable an annual 1% regional retrofit rate, estimating an approximate 1,780 to 2,050 tCO₂e in carbon savings annually. Past

and current studies have shown that a 3-5% annual retrofit rate of existing buildings is required to achieve local, provincial and federal greenhouse gas reduction targets. A higher rate would require further support from the provincial and federal levels of government.

The business case targets a Capital Region Residential Energy Retrofit Program that will drastically reduce greenhouse gas emissions in participating homes. This means programming efforts will focus to support residents in fuel switching from carbon intensive energy sources and improve home energy efficiency.

Regional Growth Strategy Implications

This program has the potential to contribute significantly to the Regional Growth Strategy goal of reducing emissions by 61% by 2038.

Social Implications

The business case offers a potential reduction in energy poverty by targeting moderate-income communities where natural gas is less prominent. The Province is shortly releasing a low income-qualified energy retrofit program and recommends that the CRD focus on other demographics until the Province of BC's program is more established.

Retrofitting and improving of homes in the capital region supports healthy homes. For example, heat pumps provide heating and cooling in one appliance and safeguard against increases in summer temperatures and heat waves that will come with climate change. Home retrofits that involve envelope improvements and air filtration also help seal homes from environmental contaminants, such as wildfire smoke, and help regulate moisture.

Financial Implications

The business case indicates that the total core budget required to operate a five-year program would be \$602,500 in 2022, increasing to \$606,500 in 2026. The detailed budget is found on page 8 of Appendix A. This fixed budget for the first five years is estimated to support the completion of home retrofits in 1% of the homes in the capital region per year.

Service Delivery Implications

This program requires an increase in service levels (refer to *2022 Service Planning – Climate Action & Adaptation* staff report, also on the September 29 agenda), and would require an increase in the requisition limit under CRD Bylaw 3510 – Climate Action & Adaptation.

Several federal and provincial level programs exist to support homeowners in retrofitting their homes. These include rebate programs (e.g., Better Homes, Canada Greener Homes Grant, and the Better Home Energy Coach). The senior government-led programs are “fuel neutral”, meaning upgrades and rebates for both electric and fossil fuel equipment (e.g., natural gas boilers) are available and may be recommended. The business case proposes to leverage those rebate programs for capital region homeowners and address identified gaps (i.e., consumer awareness, acceptance and access to products and services, and complexity navigating home renovations). The program would focus on electrification to meet emission reduction goals.

Alignment with Board & Corporate Priorities

The proposed Program aligns with the CRD Board’s Climate Emergency Declaration. This program is embedded with the CRD’s forthcoming renewed Climate Action Strategy.

NEXT STEPS

Immediate next steps include completing a retrofit financing study and a detailed study of potential retrofit packages. These items will complete a commitment to Federation of Canadian Municipalities associated with the CRD’s design study grant.

The business case identifies the future need to address larger Part 3 (i.e., multi-unit residential buildings), which make up 20% of the rental floor area in the region. Targeted outreach to the owners and property managers for these buildings could have a significant impact on community emissions and would benefit a greater proportion of lower-income households more at risk of energy poverty or climate-related health impacts. Metro Vancouver and a group of local governments are actively exploring the potential expansion of Metro Vancouver’s Strata Energy Advisor Program across the province. Staff will keep apprised of this opportunity.

CONCLUSION

The CRD Board directed staff to develop a detailed business case for a Regional Energy Retrofit Program and report back in 2021 with 2022 budget implications. Building off of lessons from previous programs, the CRD completed a CRD Residential Energy Retrofit Program Business Case that provides costs and a design framework that will provide the capital region a pathway to achieving our emission reduction goals associated with the residential built environment. The Board will consider this program, along with other financial implications, through the 2022 service planning process.

RECOMMENDATION

The Environmental Services Committee recommends to the Capital Regional District Board:

That the Capital Region Energy Retrofit – Business Case be received for information and that implementation be considered as part of the Climate Action 2022 Service Planning Process.

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Concurrence:	Robert Lapham, MCIP, RPP, Chief Administrative Officer

ATTACHMENT

Appendix A: CRD Residential Energy Retrofit Program – Business Case Phase 2 Memo – Final