City of Richmond

Report to Committee

To:	Public Works and Transportation Committee	**Date:**	February 20, 2019
From:	John Irving, P.Eng. MPA Director, Engineering	**File:**	10-6600-10-01/2019-Vol 01
Re:	**Investing in Canada Infrastructure Program – CleanBC Communities Fund**		

Staff Recommendation

1. That the submission to the Investing in Canada Infrastructure Program - British Columbia - Green Infrastructure - Climate Change Mitigation - CleanBC Communities Fund requesting funding of up to $6.2 million for the Oval Village DEU Sewer Heat Recovery Implementation project, as outlined in the report titled "Investing in Canada Infrastructure Program - CleanBC Communities Fund" dated February 20, 2019, from the Director, Engineering, be endorsed;

2. That the Chief Administrative Officer and General Manager, Engineering and Public Works be authorized to enter into funding agreements with the government for the aforementioned project should it be approved for funding, as outlined in the report titled "Investing in Canada Infrastructure Program - CleanBC Communities Fund" dated February 20, 2019, from the Director, Engineering; and

3. That, upon receipt of the funding for the aforementioned project, the City transfer the full funding amount to Lulu Island Energy Company Ltd., which is wholly owned by the City of Richmond, to deliver the aforementioned project as directed by Lulu Island Energy Company Ltd. Board of Directors.

John Irving, P.Eng. MPA
Director, Engineering
(604-276-4140)

REPORT CONCURRENCE		
ROUTED TO:	**CONCURRENCE**	**CONCURRENCE OF GENERAL MANAGER**
Intergovernmental Relations & Protocol Unit	☑	
Finance Department	☑	
Parks Services	☑	
REVIEWED BY STAFF REPORT / AGENDA REVIEW SUBCOMMITTEE	**INITIALS:** CJ	**APPROVED BY CAO**

Staff Report

Origin

In December 2018, the Province of British Columbia and Government of Canada announced cost-shared funding in locally owned green infrastructure projects that help communities use clean energy and become more energy efficient. Funding will be provided through the new CleanBC Communities Fund (CCF), part of the Investing in Canada infrastructure plan's Green Infrastructure Stream (Climate Change Mitigation sub-stream). The initial funding available is $62.94 million, with applications due by March 27, 2019.

The purpose of this report is to seek Council's endorsement for the application to the CCF for grant funding of up to $6.2 million for the Oval Village DEU Sewer Heat Recovery implementation project, which will be delivered by Lulu Island Energy Company (LIEC), wholly-owned City corporation, in partnership with Oval Village DEU (OVDEU) concessionaire Corix Utilities (Corix).

Analysis

Funding Requirements

The CCF provides funding for infrastructure projects that support the management of renewable energy, access to clean energy transportation, improved energy efficiency of buildings and the generation of clean energy. Eligible applicants are Local Governments, Indigenous Ultimate Recipients (both on and off-reserve), Not-for-Profit organizations and For-Profit organizations (when partnered with a local government or Indigenous government). Projects must meet related federal outcomes to be eligible. Eligible projects will support public infrastructure, defined as tangible capital assets primarily for public use and benefit.

The objectives of the CCF are to:

- Support local governments' and Indigenous Peoples' capital investments in energy efficiency and clean energy projects;
- Support the province's energy, economic, environmental and greenhouse gas reduction priorities and advance British Columbia's clean energy sector;
- Encourage investments in community-owned energy generation from clean or renewable resources such as biomass, biogas, geothermal heat, hydro, solar, ocean, integrated resource recovery or wind; and
- Promote community-owned projects and partnerships with industry that advance this growing sector of the provincial economy.

A project must meet at least one of the following outcomes to be eligible:

- Increased capacity to manage renewable energy;
- Increased access to clean energy transportation;
- Increased energy efficiency of buildings; and
- Increased generation of clean energy.

It is anticipated that there will be more projects that qualify for funding than there are program funds available. Eligible projects will be subject to technical evaluation and ranked according to the extent to which they meet the program's objectives and the eligibility criteria. Reductions in greenhouse gas emissions (as compared to a baseline scenario) will be a consideration in evaluating projects for funding.

Only one project per municipality may be submitted, the project must start within 2 years from the date of the application, and the project must be completed within five to six years of the approval, or by March 31, 2026.

Total funding available for the initial phase of the CCF is $62.94 million. Funding guidelines indicate that there is no cap on the maximum allowable funding amount per project; however, consideration will be given to a fair distribution of funding. Guidelines further recommend that applicants should consider whether phasing is an option where project funding would represent more than 10% ($6.294 million) of the total funding available for the intake.

A resolution endorsing the project must be approved by the appropriate authorized governing body such as a council or board. The resolution must also show commitment from the proponent to contribute its share of the eligible and ineligible costs and overages related to the project. In this project case, a resolution is needed from Council and LIEC Board of Directors.

Recommended Project - Oval Village DEU Sewer Heat Recovery Implementation

In 2014, Council approved the material terms of a Concession Agreement ("Agreement") endorsing LIEC and Corix to enter into the Agreement whereby LIEC would own the OVDEU and its infrastructure, and Corix would design, build, finance and operate the OVDEU, subject to the City setting rates for customers. There are currently eight residential buildings connected to the OVDEU system with energy supplied from two interim energy centres which use centralized natural gas boilers instead of individual boilers in order to achieve efficiencies, and therefore reduction in emissions, from the centralized approach. The plan is that when enough buildings are connected to the system, a permanent energy centre will be built which will produce low carbon energy harnessed from the Gilbert Trunk force main sewer. In 2013, Council endorsed the location for the OVDEU permanent energy centre at the western edge of the future Middle Arm Park (Attachment 1).

Grant funding from CCF would enable implementation of the low carbon energy source over the next couple of years to replace the use of the natural gas, and it would also ensure that early implementation of the low carbon energy source has no impact on the rates to customers.

During the teleconference with the administrators of CCF (Ministry of Environment and Climate Change Strategy's Climate Action Secretariat and the Ministry of Municipal Affairs and Housing), staff have heard that this funding targets projects which:

1. Include capital infrastructure for public use and benefits;
2. Reduce GHG emissions greatly; and
3. Have well-defined implementation strategy and proven project delivery.

Considering the above, staff recommends the OVDEU sewer heat recovery implementation project for the following reasons:

1. OVDEU SHR is a capital infrastructure project providing City of Richmond residents with reliable and cost competitive energy for space heating and domestic hot water. It provides financial and environmental resiliency to Richmond residents by using local and low carbon energy sources which mitigate the potential for volatility in thermal energy prices.
2. Staff have estimated that the implementation of the sewer heat recovery at the OVDEU will reduce ~5500 tonnes of GHG emissions annually immediately after the project commissioning (2023) and increase this reduction to ~9000 tonnes annually at the full build-out. Staff have estimated that over the life of the project (assumed 30 years) this would reduce ~200,000 tonnes of GHG emissions.
3. OVDEU implementation and delivery has been seamless from the start of the project. It incorporates a distinctive partnership between a experienced private utility and a municipally owned corporation for transparency and cost oversights. By means of a concession agreement executed by parties, the OVDEU project has a clearly defined financial and delivery model which is being reviewed and updated on an annual basis.

The total value of the OVDEU SHR implementation project is estimated to be $20M. If the project is successful in receiving the funding, the remainder of the funding will be secured by LIEC through the concession agreement between LIEC and Corix. LIEC may also fund a portion of the project from its provision account.

Financial Impact

There is no financial impact to the City.

The City of Richmond will be requesting up to $6.2 million towards the OVDEU sewer heat recovery implementation project under the Investing in Canada Infrastructure Program – CleanBC Communities Fund.

Should the City be successful with the grant application, the full funding amount will be transferred to LIEC to deliver the project on behalf of the City and as directed by LIEC Board of Directors. The remainder of the capital funding for the project will be secured through the concession agreement between LIEC and Corix. LIEC may also fund a portion of the project from its provision account.

Conclusion

Staff are requesting Council to endorse the submission to the Investing in Canada Infrastructure Program - British Columbia - Green Infrastructure - Climate Change Mitigation - CleanBC Communities Fund requesting funding of up to $6.2 million for the Oval Village DEU Sewer Heat Recovery Implementation project. Completion of this project will move the City closer to their objectives of provision of low carbon energy for the OVDEU customers and in turn immediate avoidance of GHG emissions from a number of developments in Richmond's City Centre area.

Peter Russell
Senior Manager, Sustainability and District Energy
(604-276-4130)

PR:ap

Att.1: Council endorsed location for the OVDEU permanent energy centre

Attachment 1 – Council endorsed location for the OVDEU permanent energy centre