



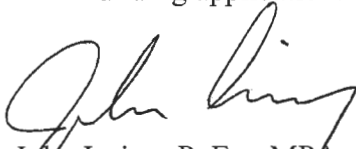
# City of Richmond

## Report to Committee

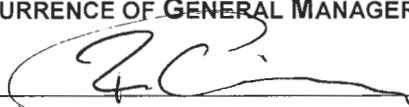

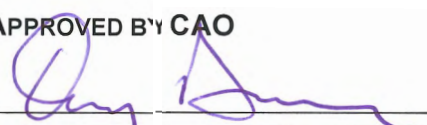
**To:** General Purposes Committee **Date:** November 10, 2017  
**From:** John Irving, P. Eng MPA **File:** 10-6125-05-01/2017-Vol 01  
 Director, Engineering  
**Re:** **Library Cultural Centre Capital Retrofit Project: Federation of Canadian Municipalities Climate Innovation Program**

### Staff Recommendation

1. That the application to the Federation of Canadian Municipalities Municipal Climate Innovation Program for up to \$1,000,000 in grant funding to support the deep energy and greenhouse gas emission reduction project planned for the Library Cultural Centre be endorsed;
2. That, should the funding application be successful, the Chief Administrative Officer and the General Manager of Engineering and Public Works be authorized to execute the agreement with the FCM on behalf of the City of Richmond;
3. That if the funding application is successful, the 2018-2022 Five Year Financial Plan Bylaw be adjusted accordingly.
4. That local Richmond Federal Ministers of Parliament be advised of the City's FCM grant funding application.

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

Att. 2

<b>REPORT CONCURRENCE</b>	
<b>CONCURRENCE OF GENERAL MANAGER</b> 	
<b>REVIEWED BY STAFF REPORT / AGENDA REVIEW SUBCOMMITTEE</b>	<b>INITIALS:</b> 
<b>APPROVED BY CAO</b> 	

**CNCL - 156**

## Origin

Staff are seeking Council endorsement for an application to the Federation of Canadian Municipalities' (FCM) Municipal Climate Innovation Program (MCIP) for grant funding to support an enhanced GHG emission reduction and deep energy retrofit project at the Library and Cultural Centre (LCC).

This deep energy and GHG emissions reduction project and grant funding application supports the following Council 2014-2018 Term Goals:

### #4 Leadership in Sustainability:

- 4.1. *Continued implementation of the Sustainability Framework.*
- 4.2. *Innovative projects and initiatives to advance sustainability.*

### #5 Partnerships and Collaboration:

- 5.1. *Advancement of City priorities through strong intergovernmental relationships.*
- 5.2. *Strengthened strategic partnerships that help advance City priorities*

### #6 Quality Infrastructure Networks:

- 6.1. *Safe and sustainable infrastructure.*

## Background

Through the 2017 capital process, Council approved two minor capital projects at the Library and Cultural Centre (LCC). The projects approved involved the replacement of the facility's aging chiller plant and one of three hot water boilers, with a total of \$450,000 in funding allocated. The development of a detailed scope of work and design for these projects has been ongoing since the projects were approved.

Best practices options have been assessed for how the benefits of these investments could be maximized. Through completing options evaluations, it was determined that deep energy and greenhouse gas (GHG) emissions were possible given further investment and infrastructure renewal. The assessment concluded that GHG emissions and conventional energy use at the facility could be reduced by 80% and 35%, respectively, with a broader scope of work. In 2016, Council endorsed an ambitious GHG emissions target for corporate buildings of 65% reduction in building related emissions by 2020 as compared to 2007 levels. This project has been identified as one the key projects the City will need to implement to achieve this target.

The FCM MCIP capital project grants provide up to 80% of eligible project costs and a maximum of \$1,000,000 in funding to support municipalities with the reduction of GHG emissions. Communities can use the funding to support projects that include measures such as the replacement of fossil fuel energy with a renewable source and increasing the energy efficiency of a facility through the reuse of waste heat. The targets for a project in this program include reducing GHG emissions of a facility by 50% from the baseline amount, with up one third of the reduction coming from renewable energy integration.

The majority of planned project costs are eligible for reimbursement through this program, which can be included in contribution requests from the date of the application submission to FCM after an agreement is reached.

### **Analysis**

The Richmond Library and Cultural Centre is an essential community cultural hub for Richmond residents and includes the City's main library branch, the Arts Centre, the Museum, an Art Gallery, a Media Lab, a Performance Hall, exhibition space, meeting rooms, and the City of Richmond Archives. Many community and school programs, public events and major festivals are conducted at the Cultural Centre each year.

The City strives to consistently renew and improve important community facilities with the objective of improving occupant comfort and equipment functionality, as well as reducing energy use and greenhouse (GHG) emissions.

Phase 1 of this expanded project would entail the replacement and upgrade of all major mechanical systems at LCC, with the ability to connect the new systems to a future renewable energy system for further conventional energy use displacement. If implemented, Phase 1 of the project will reduce emissions at LCC by approximately 60% and conventional energy use by 25%.

Phase 2 of this expanded project will implement a renewable energy system at the facility to further displace natural gas use and GHG emissions. Options for Phase 2 to be assessed include, but are not limited to, geo-exchange, solar thermal energy systems, and air to air heat pumps. Completing Phase 2 of this project would reduce GHG emissions by a further 25% and conventional energy use by a further 10%. Overall, the complete project would reduce emissions at LCC by over 200 tonnes of CO<sub>2</sub>e annually (equal to taking 60 Richmond vehicles off the road) and conventional energy use would be reduced by over 1.0 gigawatt hour annually (equal to the annual energy consumption of 25 Richmond homes).

Should the FCM MCIP funding request be successful, the City would be required to enter into funding agreements with FCM. The agreements are standard form agreements provided by FCM and include an indemnity and release in favour of FCM. As with any submission for funding to external sources, funding is not guaranteed to be granted to assist with this project.

### Financial Impact

The maximum FCM MCIP contribution is \$1,000,000 per application and up to 80% of the eligible project costs. The City is requesting the maximum contribution allowance of \$1,000,000 for this project. For the initial stages of this project Council has approved \$450,000 in funding through the 2017 Capital program. In addition, funding has been requested through the 2018 One Time Additional Level Program to completely fund Phase 1 of the project. Approved capital project funds will be used as matching funds in the event that the City's FCM application is successful and an agreement is reached. Any grant funds received from the MCIP will be used to offset approved project funds, with the 2018-2022 Five Year Financial Plan Bylaw adjusted accordingly.

The City is also exploring other funding partnerships for this project, such as incentives from Fortis BC and BC Hydro.

### Conclusion

As part of the submission process, the Federation of Canadian Municipalities (FCM) requires confirmation that Council endorses the application for funding and the potential contractual agreement with FCM. This project aligns with the City's goals and vision, and is well positioned to receive funding through the Municipal Climate Innovation Program (MCIP) given the program criteria and the expected results of the project if program funding remains available.

Staff recommend the endorsement of the application to the FCM MCIP for grant funding to support an enhanced mechanical systems upgrade at LCC to achieve deep GHG emissions and energy reductions. The completion of this project will help the City achieve its ambitious GHG emissions reduction target of 65% reduction in corporate building emissions by 2020 as compared to 2007 levels. Completing these deep energy efficiency retrofits will allow the City of Richmond to renew a key community facility, and will help the City provide further needed services to its growing community without greatly increasing its overall environmental footprint.



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Denise Tambellini  
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- Att. 1: FCM MCIP Eligible Funding Expenditures Summary
- 2: FCM MCIP Application Criteria

## MCIP Eligible and Ineligible Expenditures – Plans, Studies and Capital Projects

<b>Eligible and Ineligible Expenditures</b>		
<p>This table outlines what expenditures can be partially reimbursed by FCM.</p> <p>Please pay particular attention to any expenditure that may be ineligible. Please also note that definitions and eligibility of expenditure categories may vary from that of the Green Municipal Fund.</p> <p><b>Note: If your application is approved, expenses that are eligible for partial reimbursement must be:</b></p> <ul style="list-style-type: none"> <li>• <b>If your project has already started, please contact us to discuss eligibility.</b></li> <li>• Invoiced directly to the lead applicant.</li> <li>• An integral and an essential component of the initiative required to help achieve the environmental objective of the initiative.</li> <li>• Actually and reasonably incurred in accordance with applicable industry standards.</li> </ul> <p>FCM reserves the right to audit financial statements or expenses incurred at a future date, as audits of the submitted expenditures will not be conducted as a normal course of business when a disbursement claim is submitted. Please keep financial accounts and records, including but not limited to contracts, invoices, statements, receipts, and vouchers, for at least six years.</p>		
<b>Expenditure Category</b>	<b>Eligible Expenditures</b>	<b>Ineligible Expenditures</b>
<b>1) Pre-application</b>	N/A.	<ul style="list-style-type: none"> <li>• Any expenditure incurred prior to FCM's eligible expenditure date.</li> <li>• Expenditure of developing this proposal or application.</li> </ul>
<b>2) Administrative and Overhead Expenditures</b>	<p>Administrative expenditures that are directly linked to and have been incurred for the project, such as:</p> <ul style="list-style-type: none"> <li>• Communication expenditures (e.g. long-distance calls or faxes).</li> <li>• Permits or certifications required for the project.</li> <li>• Outsourced printing or photocopying.</li> <li>• Acquisition of documents used exclusively for the project.</li> <li>• Document translation.</li> <li>• Transportation, shipping, and courier expenditures for delivery of materials essential for the project.</li> <li>• Design and production of communication products to promote project outcomes and benefits to the public.</li> <li>• Advertising, website development, project education materials or expenditures to disseminate project</li> </ul>	<p>General overhead expenditures incurred in the regular course of business, such as:</p> <ul style="list-style-type: none"> <li>• Office space, real estate fees, and supplies.</li> <li>• Financing charges, and interest payments.</li> <li>• Promotional items.</li> <li>• Hospitality expenses (food and drink, alcohol, entertainment, etc.).</li> </ul>

	<p>communications products.</p> <ul style="list-style-type: none"> <li>• Public engagement expenditures, such as surveys, web tools, other materials.</li> </ul>	
<b>3) Capital Expenditures</b>	<ul style="list-style-type: none"> <li>• Specialized system hardware.</li> <li>• Software expenditures up to a maximum of \$25,000 will be accepted, unless otherwise approved by FCM.</li> <li>• <b>For Capital Projects only:</b> Expenditures essential for conducting the project. This would include construction expenditures, materials, renovation and modernization expenditures, and installations expenditures.</li> </ul>	<ul style="list-style-type: none"> <li>• Purchase or lease of real estate.</li> <li>• Capital expenditures related to regular business activities and not a specific requirement of the project.</li> </ul>
<b>4) Equipment Rental</b>	<ul style="list-style-type: none"> <li>• Rental of tools and equipment.</li> <li>• Related operating expenditures such as fuel and maintenance expenditures.</li> </ul>	Rental of tools or equipment related to regular business activities.
<b>5) In-Kind</b>	N/A.	Any goods and services received through donation.
<b>6) Meetings, Training Sessions, and Public Gatherings</b>	<ul style="list-style-type: none"> <li>• Expenditures associated with accessing reference materials such as standards, templates and toolkits.</li> <li>• Expenditures related to meetings and public gatherings that communicate the project to the public and that collect feedback: Examples: facility rental and audiovisual equipment.</li> </ul>	<p>Any hospitality expenses such as:</p> <ul style="list-style-type: none"> <li>• Food and drink</li> <li>• Alcohol</li> <li>• Door prizes</li> <li>• Entertainment</li> <li>• Music</li> <li>• Decorations</li> <li>• Flowers, centerpieces</li> <li>• Etc.</li> </ul>
<b>7) Professional and/or Technical Services</b>	Fees for professional or technical consultants and contractors, incurred in support of eligible activities.	<ul style="list-style-type: none"> <li>• Expenditures associated with regular business activities not related to the project.</li> <li>• Legal fees.</li> </ul>

<p><b>8) Staff Remuneration</b></p>	<p>Daily rates actually paid by the Eligible Recipient to its Employees in Canada for time actually worked on the implementation of the Project. The daily rate per employee shall include the following costs:</p> <p>a) <b>direct salaries:</b> actual and justifiable sums paid by the Eligible Recipient to Employees in accordance with the Eligible Recipient's pay scales as regular salary <u>excluding</u> overtime pay and bonuses.</p> <p>b) <b>fringe benefit:</b> in accordance with the Eligible Recipient's policies, as follows:</p> <p>i. time-off benefits (prorated to the annual percentage (%) of time actually worked on the implementation of the Project): allowable number of days to be paid by the Eligible Recipient for the following payable absences: statutory holidays, annual vacation, and</p> <p>ii. paid benefits: actual sums paid by the Eligible Recipient for paid benefits (prorated to the annual percentage (%) of time actually worked on the implementation of the Project): the Eligible Recipient's contribution to employment insurance and workers' compensation plans (where applicable), health and medical insurance, group life insurance, or other mandatory government benefits;</p> <p><i>Note: Labour costs must be documented in a manner that meets audit standards for verification of eligibility of cost and level of effort.</i></p>	<ul style="list-style-type: none"> <li>• In-kind contribution of services.</li> <li>• Participant salaries.</li> <li>• Expenditures related to regular business activities.</li> <li>• Overtime pay.</li> <li>• Bonuses / performance pay.</li> <li>• Fringe benefits such as; <ul style="list-style-type: none"> <li>o sick days</li> <li>o pension plan</li> <li>o any other fringe benefits not listed as eligible</li> </ul> </li> <li>• Costs related to ongoing or other business activities and not specifically required for the project.</li> <li>• Staff wages while receiving training or attending learning events.</li> <li>• Memberships fee or dues.</li> </ul>
<p><b>9) Supplies and Materials</b></p>	<p>Supplies and materials required to undertake the project.</p>	<ul style="list-style-type: none"> <li>• Expenditures related to regular business activities.</li> </ul>



<b>10) Taxes</b>	The portion of provincial/Harmonized Sales Tax and Goods and Services Tax for which your organization is not eligible for rebate.	The portion of Provincial/Harmonized Sales Tax and Goods and Services Tax for which your organization is eligible for rebate, and any other expenditures eligible for rebates.
<b>11) Travel and Accommodation</b>	<p>For individuals on travel status (individuals travelling more than 16 km from their assigned workplace - using the most direct, safe and practical road.);</p> <ul style="list-style-type: none"> <li>• Travel and associated expenses for implementing partners, guest speakers and consultants to the extent that the travel and accommodation rates comply with the Treasury Board of Canada guidelines, and to the extent that such travel is necessary to conduct the initiative. <a href="http://www.canada.ca/en/treasury-board-secretariat/services/travel-relocation/travel-government-business.html">www.canada.ca/en/treasury-board-secretariat/services/travel-relocation/travel-government-business.html</a></li> </ul> <p><i>Where justified, participant travel costs may be claimed with prior written consent from FCM. Under no circumstances will participant honorariums be covered.</i></p>	<ul style="list-style-type: none"> <li>• Any travel expense that is not paid in accordance with the Treasury Board of Canada guidelines</li> <li>• Any expenditure that is not necessary to conduct the project.</li> <li>• Participant honorariums.</li> </ul>

**Note: Invoices, receipts and timesheets (where applicable), must be sufficiently detailed to enable verification of expenditure eligibility and level of effort.**



## **Municipalities for Climate Innovation Program – Grant Funding Information**

### **1. Climate change capital project grants**

Grant funding of up to \$1 million and more for climate change capital projects is available for Canadian cities and communities of all sizes. These grants help municipalities adapt to the impacts of climate change, such as flooding and drought, and reduce greenhouse gas (GHG) emissions. Communities can use the funding to upgrade, build, replace, expand or purchase and install fixed assets or infrastructure, such as buildings and treatment plants.

The following list represents the general types of capital projects that this grant program is designed to support

- Extreme temperatures: Climate adaptation capital projects
- Flooding and drought: Climate adaptation capital projects
- Wind events: Climate adaptation capital projects
- Community initiatives: Climate adaptation capital projects
- Energy: Climate mitigation capital projects
- Solid waste: Climate mitigation capital projects
- Water: Climate mitigation capital projects
- Transportation: Climate mitigation capital projects
- Community initiatives: Climate mitigation capital projects

### **2. Energy: Climate mitigation capital project grants**

We provide grants for energy-focused capital projects that lead to greenhouse gas (GHG) emission reductions for municipal corporate operations and existing assets such as buildings and treatment plants or through community-based initiatives.

### **3. Eligible initiatives**

Eligible capital projects will address corporate or community GHG emissions at a site, or in a neighbourhood or region. These projects are designed to enable the adoption of a technology or solution that has the potential to reduce GHG emissions.

The following are examples of features that could be included in an eligible capital project:

- Retrofitting district energy systems to a less polluting source of energy
- Upgrading lighting and insulation in municipal facilities such as community centres, arenas, libraries or other municipal buildings
- Changing a fuel source from fossil fuels to a less polluting source of energy
- Creating an energy recovery loop to channel waste energy to heat
- Using digested solids from a wastewater treatment plant to generate gas for electricity or heat
- Capturing, processing and treating methane gas from landfill sites to produce energy

### **4. Targets**

Capital projects focused on a municipality's corporate assets should be designed to reduce GHG emissions by 50 per cent from an existing baseline. In addition:

- For buildings, two-thirds of the reduction in GHGs must come from energy efficiency measures and up to one-third may come from the use of renewable energy
- For landfill gas capture projects, the target is to capture 60 per cent of all emissions at the site

## 5. Who can apply

- Municipal governments (except applicants from Quebec<sup>1</sup>)
- Municipal partners working in partnership with a municipal government <sup>2</sup>, which includes:
  - Certain Indigenous communities that have a shared service agreement with a municipal government related to infrastructure, climate change mitigation or climate change adaptation
  - Regional, provincial or territorial organizations delivering municipal services
  - Not for profit organizations

## 6. Funding Available

There are two key aspects of the available funding;

- Grants of up to \$1,000,000 maximum per application are available
- Funding will be provided, up to a maximum of 80% of eligible project costs

## 7. Application Deadline

Applications are accepted year-round. The last date to submit an application is January 31, 2020.

Note: All eligible expenses must be incurred and all reporting, including requests for disbursements, must be submitted to FCM by February 28, 2021.

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<sup>1</sup> Quebec municipalities are currently not permitted to receive funding from the FCM's Municipalities for Climate Innovation Program. FCM is working with the province of Quebec's Ministère des Affaires municipales et de l'Occupation du territoire (MAMOT) to find a solution that will provide Quebec municipalities access to MCIP funding as soon as possible.

<sup>2</sup> Not-for-profit, non-governmental organizations and indigenous communities in Quebec can still access funding from the two programs if they meet the necessary eligibility criteria