



## ADMINISTRATIVE REPORT

Report Date: August 3, 2018  
Contact: Liz Jones  
Chris Baber  
Contact No.: 604-871-6169  
604-871-6127  
RTS No.: 12722  
VanRIMS No.: 08-2000-20  
Meeting Date: September 18, 2018

TO: Vancouver City Council

FROM: General Manager of Finance, Risk and Supply Chain Management in consultation with the General Manager of Engineering Services

SUBJECT: Application to FCM's Green Municipal Fund for New Sewage Heat Capacity for False Creek Neighbourhood Energy Utility

### **RECOMMENDATION**

THAT Council approve an application to the Federation of Canadian Municipalities' Green Municipal Fund for a loan of up to \$11.6 million and a grant of up to \$1.8 million for New Sewage Heat Capacity for False Creek Neighbourhood Energy Utility.

### **REPORT SUMMARY**

The City's 2019-2022 Capital Plan funding strategy contemplates securing of senior government contributions toward a number of Council priorities, including reducing energy consumption, increasing the use of renewable energy and reducing greenhouse gas emissions. This report seeks Council's approval of an application to be submitted to Federation of Canadian Municipalities' Green Municipal Fund (FCM GMF) for New Sewage Heat Capacity for False Creek Neighbourhood Energy Utility (NEU). Receiving FCM GMF contributions would reduce project financing costs and give national recognition to the NEU expansion project.

### **COUNCIL AUTHORITY/PREVIOUS DECISIONS**

FCM funding programs require a resolution of Council as part of the application package. In January 2011, Council adopted the revised *Greenest City 2020 Action Plan*, which targets a goal of reducing community-based GHG emissions 33% below 2007 levels by 2020.

In October 2012, Council adopted the *Vancouver Neighbourhood Energy Strategy*, to address the Greenest City 2020 Action Plan objectives through the deployment of renewable energy systems for high-density neighbourhoods.

In November 2015, Council approved the *Renewable City Strategy*, which sets a target of 100% reliance on renewable energy by 2050 and for new construction to be zero emissions by 2030.

In February 2018, Council approved the *Expansion of the False Creek Neighbourhood Energy Utility* report, which outlines a plan to expand the NEU to areas of Mount Pleasant, the False Creek Flats (including the future St. Paul's Hospital) and Northeast False Creek.

In July 2018, Council approved the 2019-2022 Capital Plan, which included the development of an additional 5 megawatts of sewage heat recovery capacity at the existing False Creek Energy Centre to enable the NEU to continue to achieve its renewable energy targets.

### **CITY MANAGER'S/GENERAL MANAGER'S COMMENTS**

The City Manager, the General Manager of Finance, Risk and Supply Chain Management, and the General Manager of Engineering Services recommend approval of the foregoing.

### **REPORT**

#### **Background/Context**

#### Federation of Canadian Municipality's Green Municipal Fund (FCM GMF)

The GMF provides low-interest loans in combination with grants to implement capital projects that demonstrate innovative solutions or approaches to municipal environmental issues and generate lessons and models for municipalities of all sizes across Canada. The program supports projects in the following areas: energy, transportation, waste and water.

The maximum funding available for most projects is a \$5 million loan in combination with a \$0.75 million grant. This maximum may be increased to \$10 million for high-ranking projects. GMF will fund up to 80% of eligible project costs. FCM accepts applications twice per year – in the spring and in the fall. GMF is a two-staged process. The first phase is an initial review. If FCM screens in a project, the municipality proceeds to the second phase – a full application.

The City has been successful in securing GMF funding for the following projects:

YEAR	PROJECT	GRANT	LOAN
2008	Southeast False Creek NEU	N/A	\$5 M
2016	Burrard Bridge Renewal and Transportation Improvement Project	\$0.75 M	\$5 M
2017	Canada's First Net Zero Fire Hall: Vancouver's Fire Hall #17	\$0.45 M	\$3 M

In scoping out projects to submit to FCM, City staff reviewed projects that meet the goals of the GMF program, are contemplated in the 2019 – 2022 Capital Plan, and are ready for implementation.

## The City-Owned Neighbourhood Energy Utility (NEU)

The NEU began operations in 2010, with a \$5 million loan from FCM to support the construction of the initial energy generation and distribution infrastructure. Through expansion of its distribution network, the NEU now supplies thermal energy for heating and hot water to over 5.2 million square feet of residential, institutional and commercial floor area (a 300% increase in its customer base since 2010). Through system efficiencies and use of renewable energy sources, the NEU eliminates most of the GHG emissions associated with conventional building heating systems. The rapid and continuous growth of the NEU customer base, which is expected to accelerate following Council's recent approval to expand the utility service area, requires investment in new renewable energy capacity.

### ***Strategic Analysis***

The New Sewage Heat Capacity for False Creek NEU will increase the renewable energy generation capacity at the existing energy plant by 5 MW. The project will enable the NEU to supply 70 percent of its energy from renewable resources in the short term, and will position the utility well for achieving 100 percent renewable energy generation in the long term.

The project is aligned with the GMF requirement for projects in the Energy Recovery/District Energy category to incorporate thermal energy from renewable sources, reduce GHG emissions, and reduce energy consumption.

City staff submitted its initial review for the New Sewage Heat Capacity for False Creek NEU project to FCM by the August 1, 2018 deadline. City staff were advised by FCM that this round of applications may receive funding over and above the maximum of \$10 million for high ranking projects. As such, staff requested \$11.6 million which is approximately 80% of the total project costs (\$14.5 million).

FCM responded favourably on August 15, 2018. The City can now proceed with a full application, which is eligible to be submitted in either of the two upcoming FCM application rounds, closing October 1, 2018 and May 1, 2019. FCM decisions will be rendered in February 2019 and September 2019, respectively. Staff are currently targeting submission in Fall 2018. FCM requires a Council resolution as part of the full application process.

### ***Implications/Related Issues/Risk***

#### ***Financial***

The New Sewage Heat Capacity for Southeast False Creek NEU project is estimated to cost \$14.5 Million.

Staff recommend that the City apply for a \$11.6 million loan and a \$1.8 million grant. Based on an indicative rate of 4%, the effective borrowing cost for the combined loan and grant would range from 1.2% to 2.5% depending on the term of the loan, below the City's borrowing rate of 2.85% on its most recent 10-year debenture issue.

Should the City be successful in its application to the FCM GMF, staff will seek Council approval for the loan agreement with FCM and incorporate the FCM financing and grant as part of its quarterly capital budget adjustments, subject to approval of the 2019 Capital Budget.

**CONCLUSION**

The City has the opportunity to secure a loan of up to \$11.6 million and a grant of up to \$1.8 million from the FCM GMF to support an increase in the sewage heat recovery capacity in the existing False Creek Energy Centre, which will enable the NEU to continue to achieve its renewable energy targets.

\* \* \* \* \*