

ADMINISTRATIVE REPORT

Report Date: May 4, 2012
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Meeting Date: May 15, 2012

TO: Vancouver City Council

FROM: Director of Finance, in consultation with General Manager of Engineering Services and Director of Sustainability

SUBJECT: Funding Application to Gas Tax Fund to UBCM for Landfill Gas Collection Optimization and Utilization Project and Sea Level Rise Adaptation Plan

RECOMMENDATION

- A. THAT Council approve a funding application to the Gas Tax Fund for \$1.5 million for the Landfill Gas Collection Optimization and Utilization Project (program: "Innovation Fund"; sub-program: "Capital Projects").
- B. THAT Council approve a funding application to the Gas Tax Fund for \$0.2 million for the Sea Level Rise Adaptation Plan (program: "Innovation Fund"; sub-program: "Capacity Building and Integrated Community Sustainability Planning Projects").

REPORT SUMMARY

The Gas Tax Fund (GTF) is a Federal funding program that is coordinated with the Provincial government and managed by the Union of BC Municipalities (UBCM). The GTF was created in 2005 and provides funding "towards environmentally sustainable municipal infrastructure to help them address their infrastructure needs and meet sustainability objectives". In 2008, the City received \$9.47 million in GTF funding to support the construction of the Neighbourhood Energy Utility in Southeast False Creek.

UBCM is accepting applications for the 2012-2014 period. The City is eligible to apply for projects as part of the "Innovation Fund" (\$16.9 million over the next three years). Two projects identified in the City's Greenest City Action Plan (2011) are recommended to be submitted: the Landfill Gas Collection Optimization and Utilization Project (\$1.5 million funding request) and the Sea Level Rise Adaptation Plan (\$0.2 million funding request). The deadline for submission is May 31, 2012.

COUNCIL AUTHORITY/PREVIOUS DECISIONS

Federal and/or Provincial funding programs typically require a resolution of Council as part of the application package.

Council approved the Greenest City Action Plan on July 12, 2011.

CITY MANAGER'S/GENERAL MANAGER'S COMMENTS

The Gas Tax Fund presents an opportunity to secure external funding to advance two priority projects identified in the City's Greenest City Action Plan. The Landfill Gas Collection Optimization and Utilization Project is a vital component in reducing the City's greenhouse gas emissions, and the Sea Level Rise Adaptation Plan is arguably the most important element as the City develops its climate change adaptation strategy.

REPORT

Background/Context

The Gas Tax Fund (GTF) is a multi-year Federal funding program that was created in 2005. The GTF is coordinated with the Provincial government and managed by the Union of BC Municipalities (UBCM). The GTF provides funding "towards environmentally sustainable municipal infrastructure to help them address their infrastructure needs and meet sustainability objectives". The sustainability objectives are: reduced greenhouse gas emissions, cleaner air and cleaner water.

In 2008, the City received \$9.47 million in GTF funding to support the construction of the Neighbourhood Energy Utility in Southeast False Creek.

UBCM is accepting applications for the next round, which covers the 2012-2014 period. A number of programs exist as part of the GTF. The City of Vancouver is eligible to apply for projects as part of the "Innovation Fund" (GTF-IF). One of the objectives of this program is to "encourage innovative, collaborative and comprehensive approaches to achieving sustainable communities". Total funding available for GTF-IF for the next three years is \$16.9 million. The GTF-IF has two sub-programs:

- "Capital Projects" (\$15.5 million in available funding); and
- "Capacity Building and Integrated Community Sustainability Planning Projects" (\$1.4 million in available funding).

Program details include:

- Municipalities can apply for a project with several phases, although each phase should be a stand-alone aspect of the project;
- A project is ineligible if it has started prior to the funding application; and
- The City can only submit for one "Capital Project" and one "Capacity Building and Integrated Community Sustainability Planning Project".

The deadline for submitting applications is May 31, 2012.

Strategic Analysis

Staff reviewed candidate projects among those currently funded in the 2012-2014 Capital Plan as well as those identified as possible emerging priorities over the next three to five years. Two projects identified in the City's Greenest City Action Plan are recommended to be submitted: the Landfill Gas Collection Optimization and Utilization Project and the Sea Level Rise Adaptation Plan.

Landfill Gas Collection Optimization and Utilization Project

Staff is recommending a \$1.5 million funding request as part of the "Capital Projects" sub-program (\$15.5 million in available GTF-IF funding).

The City's long term strategy for the Vancouver Landfill includes this project to significantly increase the capture and beneficial use of landfill gas (LFG), resulting in reduced greenhouse gas emissions and enabling new clean energy solutions.

The project consists of two integrated parts. The gas collection system component involves the installation of wells, controls and other system components at the landfill. Over the next 2-3 years, it is anticipated that between \$20 and \$25 million of gas collection infrastructure is required at the landfill (this component of the work is identified in the 2012-2014 Capital Plan).

The gas utilization component is currently being developed: several technologies are being explored, as well as the participation of public utility companies and/or private sector companies. Decisions on the gas utilization component are to be made later this year.

Taken as whole, this project will lead to a substantial increase in LFG collection at the landfill, from about 40% last year to about 75% in 2013. The project clearly meets the stated outcomes to be achieved with GTF funding including: a significant reduction in greenhouse gas emissions; introduction of innovative LFG collection and utilization solutions that can be shared with other facilities; and strong linkages with local and regional long term plans.

Sea Level Rise Adaptation Plan

Staff is recommending a \$0.2 million funding request as part of the "Capacity Building and Integrated Community Sustainability Planning Projects" sub-program (\$1.4 million in available GTF-IF funding).

This project is a priority identified in the Greenest City Action Plan: "Develop a climate change adaptation plan: current climate science indicates that Vancouver is likely to see drier summers, more intense weather events involving wind, rain and snow, and the gradual rise of sea levels as the global climate changes".

Sea level rise has been identified as a priority climate change impact warranting further planning. In 2011, the Provincial Ministry of Environment forecasted water elevations to the years 2050, 2100 and 2200.

The Sea Level Rise Adaptation Plan will be a multi-phased project which aims to understand the risks associated with sea level rise for Vancouver and potential adaptation measures in order to begin integrating risk control and/or adaptation actions. An example is to develop a better understanding of the impacts of sea level rise on coastal structures and infrastructure (such as power substations, pump stations, sewer outfalls, bridges, piers and seawall) in Vancouver and what the City can do to take (or support) appropriate actions gradually over time.

This project is well suited as an Integrated Community Sustainability Planning project. It demonstrates long-term thinking, is innovative (such planning in North America is in its infancy) and involves collaboration with partners (e.g. Port Metro Vancouver, the Musqueam First Nation, adjacent municipalities).

Preparing the Sea Level Rise Adaptation Plan is anticipated to cost about \$0.75 million. The GTF funding request is for \$0.2 million, sufficient to initiate the first phase of the plan. Staff will report back to Council with funding options for the remaining amount.

Implications/Related Issues/Risk(if applicable)

Financial

The 2012-2014 Capital Plan has an allocation of \$34.85 million for gas collection and closure projects at the landfill (with \$21.75 million identified as expenditures in the 2012 Capital Budget). If successful, the GTF funding may offset some of the LFG collection costs. Funding request is for \$1.5 million.

The 2012-2014 Capital Plan does not currently have an allocation for the Sea Level Rise Adaptation Plan, as the Capital Plan was finalized (September 2011) shortly after the Greenest City Action Plan as approved (July 2011). Staff will present funding options for the Sea Level Rise Adaptation Plan to Council later this year. Funding request is for \$0.2 million.

Environmental

Both projects are priorities identified in the City's Greenest City Action Plan. The Landfill Gas Collection Optimization and Utilization Project's main benefit will be a decrease in greenhouse gas through the collection of significantly more landfill gas. The Sea Level Rise Adaptation Plan will lay the groundwork for the City's long-term strategy with regard to climate change adaptation.

CONCLUSION

The City has the opportunity to advance two priority projects identified in the Greenest City Action Plan by applying for \$1.7 million from the Gas Tax Fund.

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