



2015 Capital Budget Adjustments for Sustainable Energy Plan

Date:	May 4, 2015
To:	Budget Committee Executive Committee
From:	Chief Corporate Officer
Wards:	All
Reference Number:	P:\2015\Internal Services\E&E\Bc15004e&e (AFS # 21259)

SUMMARY

This report requests City Council's authority to adjust the 2015 Approved Capital Budget for Sustainable Energy Plan (SEP) by reallocating approved capital funding from projects currently in the 2015 Approved Capital Budget that are being cancelled or can be deferred to the Lighting Retrofit Project in Parks Forestry and Recreation arenas.

This budget adjustment will result in a zero gross and net impact to the 2015 Approved Capital Budget for SEP. This action will allow the City to direct funding to a conservation and demand management project that will have positive economic and environmental benefits on the City as a whole.

RECOMMENDATIONS

The Chief Corporate Officer recommends that:

1. City Council authorize the reallocation of approved capital funding for the Lighting Retrofit Project in Parks Forestry and Recreation (PF&R) arenas in the Sustainable Energy Plan's 2015 Capital Budget in the amount of \$983,000 with a zero gross and net budget impact.

FINANCIAL IMPACT

There are no additional costs to the City as a result of approval of this report.

The approval of this report will result in the reallocation of a total of \$983,000 within the 2015 Approved Capital Budget for Sustainable Energy Plan, as outlined in table 1 below. The funding source is recoverable debt, which will be paid back through savings generated as a result of the lighting retrofits project in the 28 PF&R arenas. Savings which will first be used to repay the loan will be included in PF&R's 2016 Operating Budget submission.

Table 1: Recommended Capital Program Budget Adjustments

Sub-Project Name	Sub-Project (WBS No.)	2015 Plan	Reductions / Additions	Revised 2015	Comments
1652 Keele & Ellesmere	CCA801-02	\$200,000	\$(200,000)	\$0	Project Cancelled
Cummer Lodge	CCA801-05	\$205,000	\$(205,000)	\$0	Deferred
Americas Pavilion					Project Cancelled
Toronto Zoo	CCA801-07	\$205,000	\$(205,000)	\$0	Project Cancelled
Booth Yard	CCA801-01	1,000,000	\$(373,000)	\$627,000	Deferred
Arenas Lighting Retrofits	CCA801-04	\$1,317,000	\$983,000	\$2,300,000	Revised

The project meets the Sustainable Energy Plan eligibility criteria with an estimated NPV of \$1.775 million evaluated over a 20 year period, and based on expected energy savings and energy price increases of 5% per year over the same period. The simple payback is 13 years.

The project capital will be paid back through energy savings realized in PF&R's Operating Budget over 18 years (inclusive of interest) with annual debt and interest repayments of \$160,000.

The Deputy City Manager & Chief Financial Officer has reviewed this report and agrees with the financial impact information.

DECISION HISTORY

City Council at its meeting on March 10 and 11, 2015, adopted the Sustainable Energy Plan's 2015 Capital Budget, which included 2015 cash flows of \$14.037 million and 2014 carry forward funding from 2014 to 2015 of \$7.873 million.

<http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2015.EX3.4>

ISSUE BACKGROUND

The Energy & Waste Management Office (EWMO) is responsible for developing and implementing energy conservation projects in City buildings. The requested adjustments will redirect funding from projects that will be cancelled or deferred. This will improve utilization of approved capital funding in the 2015 Capital Budget for the Sustainable Energy Plan for conservation and demand management projects that demonstrate energy savings, all within the program's eligibility criteria.

The arena lighting retrofit project, initiated in 2013, involved the replacement of all Metal Halide (MH) lighting fixtures over the ice pads with fluorescent lighting fixtures (T5HO). The initial cost estimate of \$1,317,000 included in the 2015 budget was based on replacing the existing MH lighting fixtures with the Fluorescent lighting fixtures (T5HO). The current estimate of \$2,300,000 is based on the detailed assessment completed in early 2015 with recommendation to use Light Emitting Diode (LED) technology. The proposed technology (LED fixtures) is fast becoming the standard for arena lighting. PF&R is in agreement with this project, and upon approval of additional funding the project can go to tender.

COMMENTS

The following is a description of the proposed lighting retrofit project in City arenas.

The EWMO has been working closely with PF&R to develop energy conservation projects in PF&R facilities. The initial cost estimate of \$1,317,000 included in the 2015 budget was based on an early estimate using fluorescent technology. The current estimate of \$2,300,000 is based on a detailed assessment completed in 2015 with a recommendation for LED fixtures. The LED fixtures are more expensive but they have a longer rated life, increased energy savings and have a better performance than the fluorescent technology. In addition, the scope of work has changed to now include the re-wiring of the fixtures, which was not included in the early estimate. PF&R is in agreement with the revisions from the original scope and the project is ready to go to tender, pending additional funding.

The LED technology is fast becoming the standard technology for arena lighting. The LED lighting is easier to operate and all the fixtures can be dimmed as needed to increase energy savings. The new LED lamps have a very long life expectancy of 100,000 hours and therefore should also reduce maintenance costs. In summary the new lighting system will greatly improve the lighting performance, provide environmental benefits and provide substantial energy savings.

In order to offset the additional funding being allocated to the lighting retrofit project, the following projects are being cancelled or deferred:

1652 Keele & Ellesmere - It has been determined that the funding model within the SEP is not viable for 1652 Keele, based on its current use and leasing arrangement with the tenants. The Ellesmere project has not yet been developed and therefore will not be able to go forward at the present time. This project can be re-established through in future years through the Sustainable Energy Plan capital budget submission.

Cummer Lodge – This project included various energy conservation opportunities. The client is only interested in the building automation controls portion and this is potentially a much larger project than first envisioned. Therefore the original project will not proceed until an agreed upon scope is determined.

America's Pavilion – Further financial evaluation of the proposed energy conservation measures was completed and the results did not meet the criteria set forth for use of recoverable debt funding in the SEP capital program. Therefore the project will not proceed.

Booth Yard – Energy conservation measures at this site were deemed viable however agreement to move forward with the existing site user has not been reached. Therefore, this project will not proceed in 2015. Should agreement be reached at a later date this project can be included in future SEP capital budget submissions.

In conclusion, Council approval is being requested to amend the Sustainable Energy Plan 2015 Capital Budget to better align cash flows with program requirements, in accordance with Section 71-9 B to E of the Financial Control By-Law.

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SIGNATURE

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