

Analyst Briefing Notes

Budget Committee

November 3, 2009

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PART I: CAPITAL PROGRAM**Executive Summary**

- The Sustainable Energy Plan's 10-Year Recommended Capital Plan provides funding of \$100.796 million for initiatives that advance the City's strategic priority actions to continue to meet the greenhouse gas emissions reduction target established by City Council.
- Funding for the 2010 Recommended Capital Budget and 2011-2019 Recommended Capital Plan will help position the City to become a world leader in the sustainable use of energy from local, clean and renewable sources.
- All projects included in the Sustainable Energy Plan are Service Improvement projects and consist of the following major initiatives:
 - Completion of Energy Retrofit projects at various Parks, Forestry and Recreation facilities (\$1.925 million); upgrades to City Hall Facilities (\$7.105 million); expansion of the Deep Lake Water Cooling program to Union Station (\$3.765 million); continuation of implementation plans for achieving a sustainable energy state under the Community Energy Plan (\$2.431 million); and providing loans from the Toronto Energy Conservation Fund (\$55.879 million) and the Toronto Green Energy Fund (\$20.420 million) for retrofits to facilities in the Municipal, Academic, School, and Hospital (MASH) sector.
- The 2009 Approved Capital Budget of \$32.279 million was 11.9% or \$3.841 million spent, as at September 30th, 2009. Actual expenditures by year-end are anticipated to be \$25.553 million or 79.2% of the 2009 Approved Capital Budget. The projected under-spending to year end is a result of the timing of the receipts of the loan applications and the additional steps required to be taken to review and complete the disbursement of the loans.
 - The projection of 2009 funding to be carried forward into the 2010 Recommended Capital Budget is \$6.253 million. The Energy Retrofit at City Hall project requires \$1.508 million; Toronto Energy Conservation Fund \$3.768 million; Toronto Green Energy Fund \$0.677 million; and Energy Retrofit Projects at Solid Waste Transfer Stations require \$0.300 million to be carried forward into 2010.
- The 10-Year Recommended Capital Plan totals \$107.049 million, including 2009 carry forward funding into 2010 of \$6.253 million, of which \$78.738 million is projected for the first 5 years, with the final 5 years requiring funding of \$28.311 million or 26.4%.
 - Over the 10-year planning horizon, funding for the Sustainable Energy Plan is primarily provided through reserve funding which accounts for approximately 98% or \$98.283 million. Funding for the Energy Retrofit Projects comes from debt recovered from energy savings and the Federation of Canadian Municipalities (FCM) (\$1.444 million and \$0.481 million respectively or 1%). The Deep Lake Water Cooling – Union Station has Infrastructure Stimulus Funding (\$0.588 million or 1%).

- Changes to the 2009-2018 Approved Capital Plan amount to \$10.385 million or 12.1% compared to the 2010 Recommended Capital Budget and 2011-2018 Recommended Capital Plan. These include key changes to the following program areas within the Sustainable Energy Plan: Toronto Energy Conservation Fund and Toronto Green Energy Fund Future Projects to reflect a new forecast of loan repayments and interest earned (\$18.662 million) and the removal of the Toronto Home Energy Loan Program (\$8.500 million) as the program was transferred to the Toronto Environment Office's Operating Budget.
- The Sustainable Energy Plan has approved funding in the 10-Year Recommended Capital Plan of which \$0.588 million is from the Federal government's ISF program in 2010 for the Deep Lake Water Cooling System at Union Station.
- The 10-Year Recommended Capital Plan will result in operating impacts from the previously approved Energy Retrofits at City Hall project for 2010 of (\$0.165) million; 2011 of (\$0.200) million; and 2012 of (\$0.100) million. The operating impacts reflect the energy savings that will be realized from the implementation of the retrofits.
- The 10-Year Recommended Capital Plan provides funding to advance the following priority actions outlined in the Mayor's and Council's policy agenda:
 - **Climate Change, Clean Air and Sustainable Energy Action Plan:** Funding of \$97.491 million is recommended to continue to implement successful city-building initiatives like the world-leading Climate Change Action Plan that cut greenhouse gas emissions to help combat global warming for projects such as Energy Retrofits (\$1.925 million); the Toronto Energy Conservation Fund (\$55.879 million) and the Toronto Green Energy Fund (\$20.420 million) which provide loans to the MASH sector for retrofits to facilities and to acquire technology for renewable energy.
 - **A Cleaner and More Beautiful City - Developing a comprehensive public space beautification plan:** Funding of \$3.305 million is recommended to renew and improve our public spaces, including the redesign of Nathan Phillips Square.
- The 2010 Recommended Capital Budget for previously approved and new/change in scope projects of \$23.323 million is 100% allocated to Service Improvement projects.
- Approval of the 2010 Recommended Capital Budget will result in a commitment to future year funding reductions for change in scope projects of \$(3.452) million in 2011 and \$(1.578) million in 2012. The change in scope reflects fewer funds available for future year projects as a new forecast was done for loan repayments and interest to the Toronto Energy Conservation Fund and the Toronto Green Energy Fund.
- The 2009 labour disruption impacted the project timeline for the Toronto Energy Conservation Fund and Toronto Green Energy Fund as loan applications could not be processed. This has resulted in disbursement of funds being slightly delayed. It should not impact the Sustainable Energy Plan's program delivery for the 2010 Recommended Capital Budget and 2011-2019 Recommended Capital Plan.
- The 2010 Recommended Capital Budget of \$23.323 million provides funding to:

- Begin energy retrofit projects at various Parks, Forestry and Recreation facilities that were not included in previous projects (\$1.000 million); and
- Continue to implement energy retrofits at City Hall (\$1.565 million), realize significant progress on turning Nathan Phillips Square into a showcase for sustainability (\$2.600 million); implement Deep Lake Water Cooling at Union Station (\$1.765 million) and make progress towards moving the City from a state of unsustainable energy use to a state of energy sustainability by the continuation of the Toronto Energy Conservation Fund (\$9.619 million) and the Toronto Green Energy Fund (\$5.208 million) which provides loans to the MASH sector for retrofits of facilities and investment in technology for renewable energy.
- The Toronto Energy Conservation Fund (TECF) and the Toronto Green Energy Fund (TGEF) help the City meet its Climate Change Action Plan. So far, the loans committed as of October 1, 2009 from the Funds will reduce an estimated 1,814 kW in energy demand and save 210,614 m³ in natural gas. It is expected that 23,908 tons of carbon dioxide (CO₂) emissions per year will be reduced which is equivalent to the amount of CO₂ produced by approximately 6800 cars per year or comparable to the CO₂ absorbed annually by a forest about 30 times the size of High Park. There is estimated annual energy savings of 22,817,577 kWh per year which is equivalent to the electricity used by almost 1600 homes per year. These savings are expected after the projects are completed which is usually between one and two years after receiving the loans or project start date.

Recommendations

The City Manager and Chief Financial Officer recommend that:

1. Council approve the 2010 Recommended Capital Budget for the Sustainable Energy Plan with a total project cost reduction of \$(8.563) million, and 2010 cash flow of \$29.576 million and future year commitments of \$37.096 million comprised of the following:
 - a) New Cash Flow Funding for:
 - i) 2 change in scope sub-projects with a 2010 total project cost reduction of \$(8.563) million that requires cash flow reduction of \$(3.533) million in 2010 and a future year commitment reduction of \$(3.452) million in 2011; and \$(1.578) million in 2012.
 - ii) 10 previously approved sub-projects with a 2010 cash flow of \$26.856 million and a future year commitment of \$23.242 million in 2011; and \$18.884 million in 2012.
 - b) 2009 approved cash flow for 5 previously approved sub-projects with carry forward funding from 2009 into 2010 totalling \$6.253 million;
2. Council approve the 2011-2019 Recommended Capital Plan for Sustainable Energy Plan totalling \$40.377 million in project estimates, comprised of \$0.973 million in 2011; \$1.067 million in 2012; \$3.841 million in 2013; \$6.185 million in 2014; \$6.059 million in 2015; \$6.190 million in 2016; \$6.324 million in 2017; \$4.864 million in 2018; and \$4.874 million in 2019; and
3. Council consider operating savings of \$(0.165) million in 2010; \$(0.200) million in 2011; and \$(0.100) million in 2012 emanating from the approval of the 2010 Recommended Capital Budget for inclusion in the 2010 and future year operating budgets.
4. Council approve an amendment to the total project cost of the Better Buildings Partnership - BBP project from \$12.058 million to \$3.673 million, changing future year cash flows from commitments to estimates based on a re-evaluation of funding requirements. There will be no change to the overall plan for the project.

PART I: CAPITAL PROGRAM

2009 Capital Variance Review

2009 Budget to Actuals Comparison - Total Gross Expenditures (\$000s)					
2009 Approved	Actuals as of Sept 30th (3 rd Qtr Variance)		Projected Actuals at Year End		Balance
\$	\$	% Spent	\$	% Spent	\$ Unspent
32,279	3,841	11.9%	25,553	79.2%	6,726

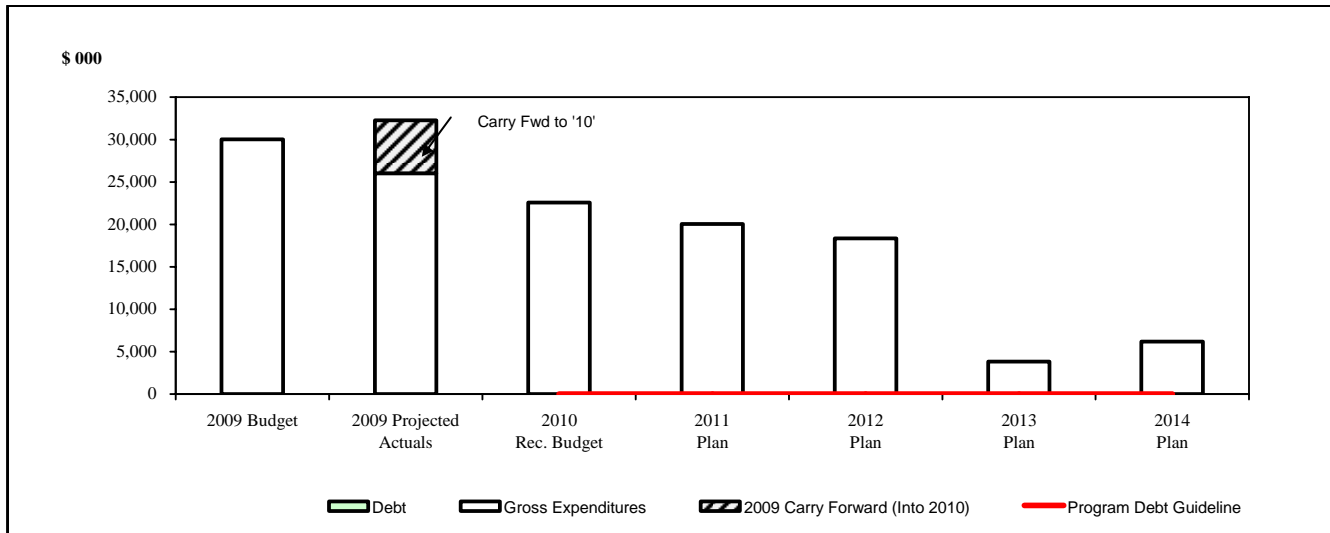
The Sustainable Energy Plan's (SEP) actual expenditures totalled \$3.841 million or 11.9% of the 2009 Approved Capital Budget of \$32.279 million, as at September 30th, 2009. Actual expenditures by year-end are anticipated to be \$25.553 million or 79.2% of the 2009 Approved Capital Budget. Most Purchase Orders have already been issued for the Energy Retrofit projects and the invoices are expected to be processed in the fourth quarter of 2009. The Energy Efficiency Office has received a significant number of letters of commitment, applications and expressions of interest for funds and the actual disbursement of funds will take place later in the year. All projects are Service Improvement and the principal causes of the projected under expenditures for the year are:

- The Toronto Energy Conservation Fund (TECF) and Toronto Green Energy Fund (TGEF) – The Program has loan applications that will be disbursed in 2009 totalling \$17.460 million or 80% of the \$21.800 million approved in 2009. The Energy Efficiency Office has received letters of commitment, applications and expressions of interest for the total amount of 2009 approved cash flow but expect that \$4.445 million of the funds will not be disbursed until early in 2010.
- Upgrades –City Facilities- This project includes the first phase of initiatives for the retrofit program in City Hall. A pilot project will be conducted in 2009 with a projected expenditure of \$0.500 million. Implementation of the planned retrofits will not begin until the pilot project has been concluded, consequently, \$2.000 million of the 2009 approved cash flow of \$2.500 million will be not be spent.

The labour disruption impacted the timelines for the TECF and the TGEF as loan applications could not be processed. It will not significantly impact the Sustainable Energy Plan's future capital program delivery.

10-Year Capital Plan

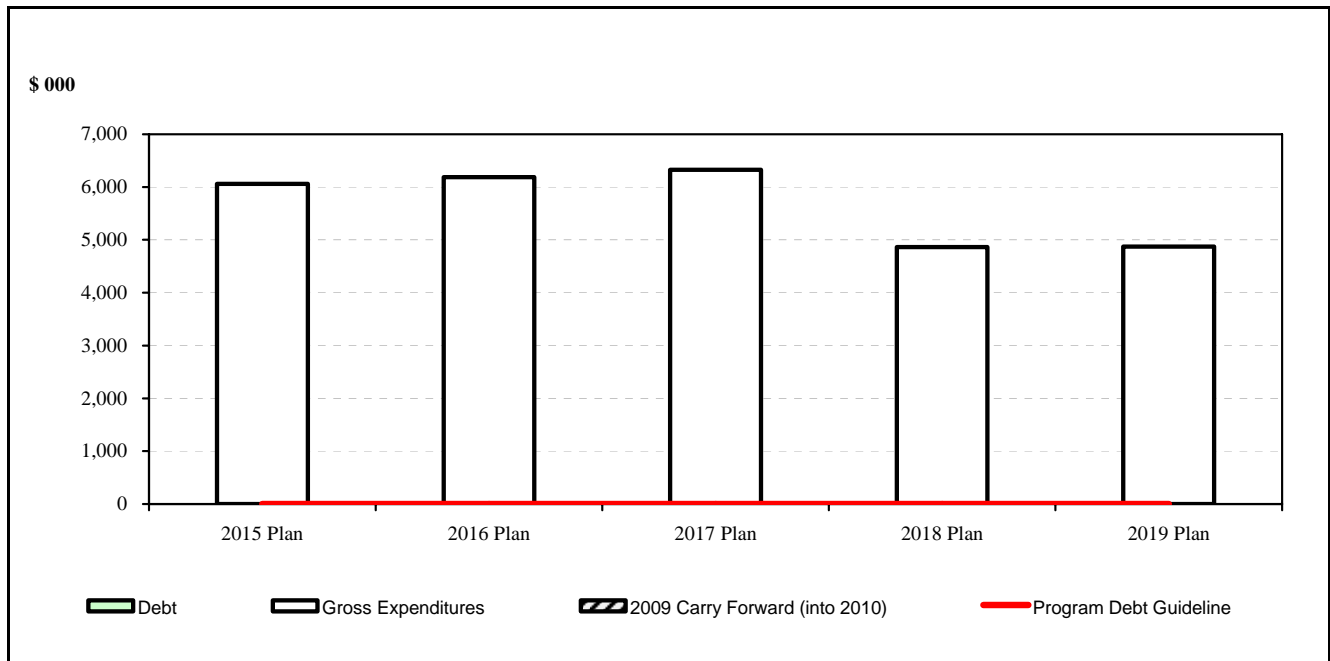
2010 Recommended Capital Budget, 2011-2014 Recommended Capital Plan



	2010 Rec. Budget and 2011-2014 Plan								
	2009		2010	2011	2012	2013	2014	2010-2014 Total	Five Year Percent
	Budget	Projected Actual							
Gross Expenditures:									
2009 Capital Budget & Approved FY Commitments	32,279	26,026	26,811	20,643	16,280	4,767	481	68,982	
Recommended Changes to Approved FY Commitments			45	2,599	2,604	(4,767)	(481)		
2010 New/Change in Scope and FY Commitments			(3,533)	(3,452)	(1,578)			(8,563)	
2011 - 2014 Capital Plan Estimates				973	1,067	3,841	6,185	12,066	
1-Year Carry Forward to 2010		6,253							
Total Gross Annual Expenditures & Plan	32,279	32,279	23,323	20,763	18,373	3,841	6,185	72,485	
Program Debt Target									
Financing:									
Recoverable Debt	2,265		750	694				1,444	2%
Reserves/Reserve Funds	27,745		21,735	19,838	18,373	3,841	6,185	69,972	97%
ISF / RInC			588					588	1%
Other Revenue	2,269		250	231				481	1%
Total Financing	32,279		23,323	20,763	18,373	3,841	6,185	72,485	100%
By Category:									
Health & Safety									0%
Legislated									0%
SOGR									0%
Service Improvement	32,279		23,323	20,763	18,373	3,841	6,185	72,485	100%
Growth Related									0%
Total By Category	32,279		23,323	20,763	18,373	3,841	6,185	72,485	100%
Yearly SOGR Backlog Estimate (not addressed by current plan)									
Accumulated Backlog Estimate (end of year)									
Operating Impact on Program Costs			(165)	(200)	(100)			(465)	
Debt Service Costs									

10-Year Capital Plan

2015-2019 Recommended Capital Plan



	2015-2019 Capital Plan					2010-2019 Total	10-Year Total Percent
	2015	2016	2017	2018	2019		
Gross Expenditures:							
2009 Capital Budget & Approved FY Commitments						68,982	
Recommended Changes to Approved FY Commitments						(8,563)	
2010 New/Change in Scope and FY Commitments							
2015 - 2019 Capital Forecast Estimates	6,059	6,190	6,324	4,864	4,874	40,377	
Total Gross Annual Expenditures & Plan	6,059	6,190	6,324	4,864	4,874	100,796	
Program Debt Target						0	
Financing:							
Recoverable Debt						1,444	1%
Reserves/Reserve Funds	6,059	6,190	6,324	4,864	4,874	98,283	98%
ISF / RInC						588	1%
Other Revenue						481	0%
Total Financing	6,059	6,190	6,324	4,864	4,874	100,796	100%
By Category:							
Health & Safety							
Legislated							0%
SOG							0%
Service Improvement	6,059	6,190	6,324	4,864	4,874	100,796	100%
Growth Related							0%
Total By Category	6,059	6,190	6,324	4,864	4,874	100,796	100%
Yearly SOGR Backlog Estimate (not addressed by current plan)							
Accumulated Backlog Estimate (end of year)							
Operating Impact on Program Costs						(465)	
Debt Service Costs							

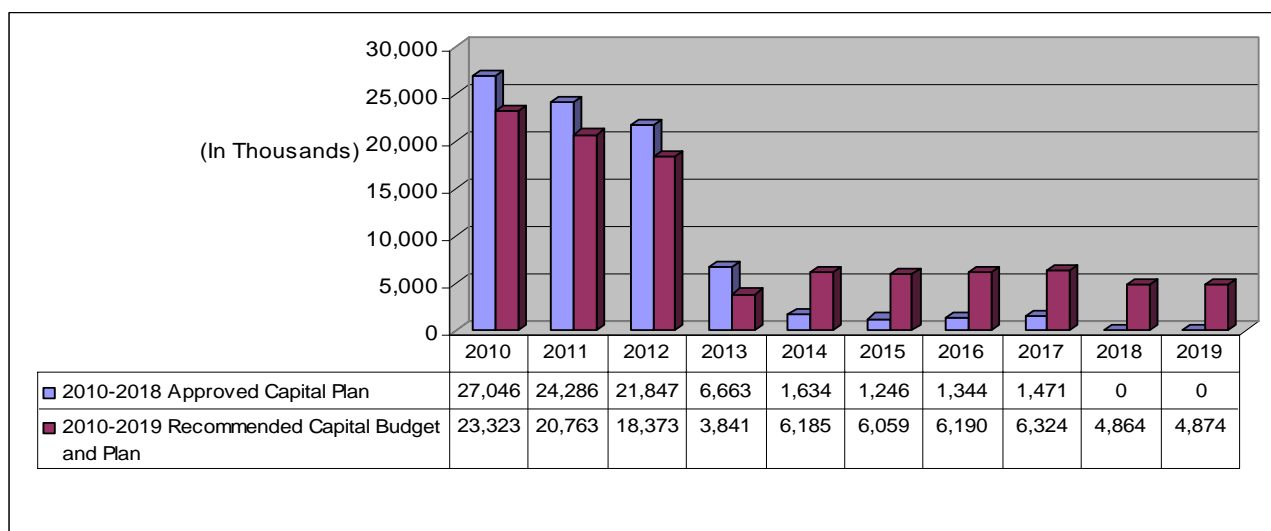
10-Year Capital Plan Overview

- Funding for the 2010 Recommended Capital Budget and 2011-2019 Recommended Capital Plan will help position the City to become a world leader in the sustainable use of energy from local, clean and renewable sources.
- The Sustainable Energy Plan's 10-Year Recommended Capital Plan provides funding of \$100.796 million for initiatives that advance the City's strategic priority actions to continue to meet the greenhouse gas emissions reduction target established by City Council.
- The 10-Year Recommended Capital Plan will be funded mainly from reserves and reserve funds totalling \$98.283 million of which \$49.282 million is funded from the Strategic Infrastructure Partnership Reserve Fund. Other sources of funding consist of the following:
 - Interest accrued and loan repayments on the \$62.000 million revolving loan approved as part of the Sustainable Energy Action Plan will generate \$37.406 million by 2019 to be used in the continuation of the greenhouse gas emissions reduction;
 - Recoverable debt of \$1.444 million and funding from the Federation of Canadian Municipalities of \$0.481 million for Energy Retrofit Programs;
 - Continuation of the Better Buildings Partnership program with funding of \$9.271 million from the Better Buildings Partnership Loan Repayment Reserve Fund; and
 - ISF Funding for \$0.588 million for the Deep Lake Water Cooling at Union Station.
- All of the recommended funding is allocated to Service Improvement projects. Significant projects over the 10-Year Capital Plan period are as follows:
 - Completion of Energy Retrofit projects at various Parks, Forestry and Recreation facilities (\$1.925 million);
 - Continuation of initiatives to upgrade City Hall Facilities (\$7.105 million) and to expand the Deep Lake Water Cooling program at Union Station (\$3.765 million); to provide loans from the Better Building Partnership (\$9.271 million) for significant energy environmental improvements to not-for-profit or public sector organizations' buildings; to achieve the City's goal on climate change and improving air quality by providing loans from the Toronto Energy Conservation Fund (\$55.879 million) and from the Toronto Green Energy Fund (\$20.420 million) for retrofits to facilities in the Municipal, Academic, School, and Hospital (MASH) sector; and to continue the development of implementation plans for achieving sustainable energy state under the Community Energy Plan (\$2.431 million).
- The 2009 summer labour disruption will not significantly impact Sustainable Energy Plan's program delivery for the 2010 Recommended Capital Budget and 2011-2019 Recommended Capital Plan.
- The 2010 Recommended Capital Budget and 2011-2019 Recommended Capital Plan will impact future year Operating Budgets for various City Programs generating savings of \$(0.465) million net over the five-year period. These energy savings will be achieved from the completed retrofit projects of City facilities.

Key Changes to the 2009-2018 Approved Capital Plan

The following highlights the changes from the 2009-2018 Approved Capital Plan with the 2010-2018 Recommended Capital Budget and Plan. As outlined in the table below, the 2010 Recommended Capital Budget of \$23.323 million in cash flow represents a decrease of 13.8% or \$3.723 million compared to the 2010 Approved Capital Plan estimate of \$27.046 million. There is a \$10.385 million or 12.1 % increase in the 2010 Recommended Capital Budget and 2011-2018 Recommended Capital Plan over the 9 year period.

Changes to the 2009-2018 Approved Capital Plan



Significant changes include:

- **Toronto Energy Conservation Fund and Toronto Green Energy Fund Future Projects**

The Toronto Energy Conservation Fund and the Toronto Green Energy Fund are revolving loan funds. A forecast for loan repayments and interest earned in 2015-2018 was not included in the 2009-2018 Approved Capital Plan. The revised forecast results in an increase of \$18.662 million to the 10-Year Capital Plan.

- **Toronto Home Energy Loan Program**

On August 5 and 6, 2009, City Council adopted the report *EX33.34 The Live Green Toronto Home Energy Efficiency Incentive Program* which resulted in the transfer of the Toronto Home Energy Program to the Toronto Environment Office. The 2010-2019 Recommended Capital Budget and Plan has been reduced by \$8.500 million to reflect the transfer of this project.

Summary of Project Changes

Key Projects (\$000s)	2010	2011	2012	2013	2014	2015	2016	2017	2018	2010 - 2018
TECF - Future Years Projects	(503)	(1,233)	474	(1,936)	3,648	3,807	3,839	3,845	3,854	15,795
TGEF - Future Years Projects	(944)	(555)	(447)	(121)	903	1,006	1,007	1,008	1,010	2,867
Toronto Home Energy Loan Program	(2,000)	(3,000)	(3,500)							(8,500)

Project Financing

The Sustainable Energy Plan is funded from reserves, recoverable debt and other third party funding. No debt is required for this program.

Energy Retrofit

The Energy Retrofit Program was established in 2004 to facilitate the City's carbon dioxide reduction and energy consumption objectives. The financing for this Program is a combination of City debt (recoverable) and funding from the Federation of Canadian Municipalities (FCM). Savings realized in Program operating budgets due to energy cost savings are redirected towards the debt repayment until the debt has been fully repaid. The Energy Retrofit Program will continue to be funded from recoverable debt (\$1.444 million) and funding provided by the FCM for the duration of the project (\$0.481 million).

Better Buildings Partnership Program

This program provides support for projects that improve the energy performance of buildings of registered non-profit or public sector organizations within the boundaries of the City of Toronto. The funding is initially provided by the City from the Better Buildings Partnership Loan Repayment Reserve Fund (\$9.271 million). Loans will be paid back to the Reserve Fund so that energy efficiency measures can continue to be financed.

Sustainable Energy Action Plan

The Sustainable Energy Plan was approved by Council during the 2008 Capital Budget Process. Funding is provided from the Strategic Infrastructure Partnership Reserve Fund. In total \$84 million was approved for this plan. A summary of the total unallocated funds, loan amounts granted to date, interest earned and repayments available for distribution follows:

- *Toronto Energy Conservation Fund*

This is a revolving fund for energy retrofits for facilities in the Municipal, Academic, Social, and Health entities (MASH) and not-for-profit sectors. A total of \$42.000 million was approved for this project and by 2012, it is anticipated that the full amount will be disbursed. During the 10-year period, \$33.022 million in loans is expected to be repaid into the program and \$2.270 million in interest will be earned. The loan repayments and interest will enable a further \$28.880 million in loans for future sustainable energy projects.

Year	Balance at Start of the Year	Amount Disbursed	Repayment	Interest	Redisbursement of Loan Repayments for Future Year Projects	Balance at Year End	Funding to Community Energy Plan
2008	42,000	(375)				41,625	
2009	41,625	(10,857)		769		31,538	(150)
2010	31,388	(12,768)	1,123	478	(619)	19,602	(640)
2011	18,962	(9,000)	2,350	284	(961)	11,634	(408)
2012	11,226	(9,000)	3,111	78	(2,225)	3,189	(1,343)
2013	1,846		3,922	98	(1,846)	4,021	
2014	4,021		3,715	93	(4,020)	3,808	
2015	3,808		3,745	94	(3,807)	3,839	
2016	3,839		3,751	94	(3,839)	3,845	
2017	3,845		3,760	94	(3,845)	3,854	
2018	3,854		3,769	94	(3,854)	3,863	
2019	3,863		3,777	94	(3,863)	3,872	
Total	3,863	(42,000)	33,022	2,270	(28,880)	3,872	

- *City of Toronto Green Energy Fund*

A total of \$20.000 million was approved for revolving loans to the MASH sector to acquire technology for renewable energy. Support through a loan program would help move these technologies to market acceptance and would assist the City in being a leader in renewable energy. By 2012, it is anticipated that the full \$20.000 million will be disbursed. During the 10-year period, \$8.755 million in loans is expected to be repaid into the program and \$0.783 million interest earned. The loan repayments and interest earned will enable a further \$8.526 million in loans for future sustainable energy projects.

Year	Balance at Start of the Year	Amount Disbursed	Repayment	Interest	Future Year Projects	Balance at Year End
2008	20,000	(825)				19,175
2009	19,175	(6,604)		314		12,886
2010	12,886	(5,571)	371	184	(314)	7,556
2011	7,556	(4,000)	647	91	(556)	3,739
2012	3,739	(3,000)	843	21	(738)	864
2013	864		987	25	(864)	1,012
2014	1,012		981	25	(1,012)	1,006
2015	1,006		983	25	(1,006)	1,008
2016	1,008		984	25	(1,007)	1,009
2017	1,009		985	25	(1,008)	1,010
2018	1,010		986	25	(1,010)	1,011
2019	1,011		987	25	(1,011)	1,012
Total	1,011	(20,000)	8,755	783	(8,526)	1,012

- *Upgrades - City Facilities and Deep Lake Water Cooling-Union Station*

Upgrades at City Facilities include initiatives to make City Hall and Nathan Phillips Square a show case for energy efficiency and sustainability. The Deep Lake Water Cooling (DLWC) project will enable the City to reduce emissions and its demand for electricity at Union Station by approximately 75% compared to conventional cooling systems. These projects are funded from the Strategic Infrastructure Partnership Reserve Fund and these funds will not be replenished through repayment.

Infrastructure Stimulus Fund (ISF)

The Federal government recently established a new \$4.000 billion Infrastructure Stimulus Fund (ISF). The Infrastructure Stimulus Fund complements existing federal and provincial infrastructure funding by focusing on short-term objectives for economic stimulus. The full \$4.000 billion has been distributed across Canada for projects over the 2009-2010 and 2010-2011 fiscal years.

The Sustainable Energy Plan has approved funding in the 10-Year Recommended Capital Plan from the federal government’s ISF program totalling \$0.588 million for the Deep Lake Water Cooling for Union Station. Funding from the ISF program will replace funds that would have been withdrawn from the Strategic Infrastructure Partnership Reserve Fund. The project has been accelerated to meet the criteria of the program.

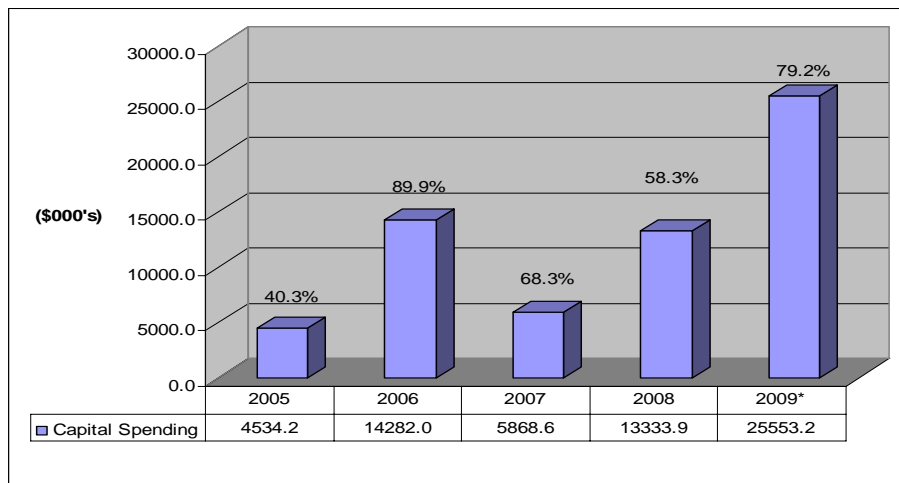
Infrastructure Stimulus Fund (ISF) 2010-2011

Sub-Project	Total				2010		
	Total	Debt	ISF	Other	Debt	ISF	Other
Deep Lake Water Cooling - Union Station	1,765		588	1,177		588	1,177
Total	1,765		588	1,177		588	1,177

Program Capacity and Readiness to Proceed

Actual expenditures for the Sustainable Energy Plan in 2009 are anticipated to be \$25.553 or 79.2% of the 2009 Approved Capital Budget. This rate represents an improvement over the Program’s 2008 spending rate of 58.2%. Prior to 2008, the Capital Budget was comprised of the Energy Retrofit Program only and did not have any Sustainable Energy Plan projects. Therefore, lower spending rates in the years prior to 2008 are not indicative of future years’ readiness to proceed.

Sustainable Energy Plan Capital Budget Spending (2005-2009)



The timing of disbursements of loans from the Sustainable Energy Funds may pose a concern in future years as there is a time lag between the commitment of the loan to the receiver and actual disbursement of the funds. The Program is successful in attracting clients from the MASH sector and other not-for-

profit organizations and has commitments for all of the funds planned in 2009. The projected spending rate for 2009 takes into account that actual disbursement for some funds will take place in early 2010. The Program expects to disburse all funds from the 2010 Recommend Capital Budget and 2011-2019 Recommended Capital Plan as they continuously receive intent to apply applications and anticipate even further interest in the program when the Ontario Government finalizes and implements the Green Energy Act.

The Program expects to complete all Energy Retrofit projects and City Facilities Upgrades by 2011 and the Deep Lake Water Cooling Project at Union Station by 2012.

State of Good Repair (SOGR) Backlog

The Program does not have a backlog of State-of-Good-Repair projects.

Capital Projects Highlights

The 2010 Recommended Capital Budget and 2011-2019 Recommended Capital Plan advances the strategic objectives of the Sustainable Energy Plan that supports two key Mayor and Council priorities:

Climate Change Adaptation, Clean Air and Sustainable Energy Action Plan:

The 2010 Recommended Capital Budget and 2011-2019 Recommended Capital Plan provides \$97.491 million to continue to implement successful city-building initiatives like the world-leading Climate Change Plan and to cut greenhouse gas emissions to help combat global warming.

Cleaner and More Beautiful City - Developing a comprehensive public space beautification plan:

The 2010 Recommended Capital Budget and 2011-2019 Recommended Capital Plan provides \$3.305 million to renew and improve our public spaces, including the redesign of Nathan Phillips Square.

The chart below illustrates how the Toronto Energy Conservation Fund (TECF) and the Toronto Green Energy Fund (TGEF) help the City meet its Climate Change Action Plan. So far, the loans committed as of October 1, 2009 from the Funds will reduce an estimated 1,814 kW in energy demand and save 210,614 m³ in natural gas. The expected reduction of 23,908 tons of carbon dioxide (CO₂) emissions per year is equivalent to the amount of CO₂ produced by approximately 6800 cars per year or comparable to the CO₂ absorbed annually by a forest about 30 times the size of High Park. The estimated annual energy savings of 22,817,577 kWh per year is equivalent to the electricity used by almost 1600 homes per year. These savings are expected after the projects are completed which is usually between one and two years after receiving the loans or project start date.

Sustainable Energy Funds Environmental Impact

Loan Type	Total Loans	Total Loan Amount	Total Project Costs	Total kW	Total kWh	Total Nat. Gas m ³	Total CO ₂ Tonnes per Year
TECF	10	5,480,070	35,895,520	1,306	18,703,042	210,614	19,793
TECF/TGEF	1	1,000,000	5,100,000	92	1,300,000		1,300
TGEF	9	4,503,371	16,077,951	416	2,814,535		2,815
Grand Total	20	10,983,441	57,073,471	1,814	22,817,577	210,614	23,908

Summary of Major Capital Initiatives

(In \$Thousands)	2010 Rec. Budget	2011 Plan	2012 Plan	2013 Plan	2014 Plan	2015 Plan	2016 Plan	2017 Plan	2018 Plan	2019 Plan	2010-2019 Total
New & Expanded Facility Projects											
IT Projects											
Sub-Total											
Other Major City Initiatives:											
Energy Retrofit Projects	1,000	925									1,925
Upgrades - Facilities	4,165	2,940									7,105
Deep Lake Water Cooling - Union Station	1,765	1,000	1,000								3,765
Better Building Partnerships	886	973	1,067	1,131	1,153	1,246	1,344	1,471			9,271
Toronto Energy Conservation Fund	9,619	9,961	11,225	1,846	4,020	3,807	3,839	3,845	3,854	3,863	55,879
City of Toronto Green Fund	5,208	4,556	3,738	864	1,012	1,006	1,007	1,008	1,010	1,011	20,420
Community Energy Development Plan	680	408	1,343								2,431
Sub-Total	23,323	20,763	18,373	3,841	6,185	6,059	6,190	6,324	4,864	4,874	100,796
Total	23,323	20,763	18,373	3,841	6,185	6,059	6,190	6,324	4,864	4,874	100,796

The initiatives outlined above position the City to move from an unsustainable state of energy use to a state of energy sustainability complementing the implementation of the Climate Change and Clean Air Action Plan.

10-Year Capital Plan:
Incremental Operating Impact Summary

(In \$Thousands)	2010 Rec. Budget	2011 Plan	2012 Plan	2013 Plan	2014 Plan	2015 Plan	2016 Plan	2017 Plan	2018 Plan	2019 Plan	2010-2019 Total
2010 Recommended Capital Budget											
Program Costs (Net)	(165)	(200)	(100)								(465)
Approved Positions											
Debt Service Costs											
Recommended 10-Year Capital Plan											
Program Costs (Net)											
Approved Positions											
Debt Service Costs											
Total											
Program Costs (Net)	(165)	(200)	(100)								(465)
Approved Positions											
Debt Service Costs											

Debt Service cost of repayment of principal and interest is calculated according to corporate guidelines, in the following manner: 2.5% Year 1, and 13% for subsequent years.

The 2010 Recommended Capital Budget and 2011-2019 Recommended Capital Plan will provide future year Operating Budget savings of \$(0.465) million net over the five-year period, with no projected impact for the 2015-2019 period. The Operating Budget impact arises from the upgrades to City Hall which will generate energy savings in 2010 of \$(0.165) million; \$(0.200) million in 2011; and \$(0.100) million in 2012.

These estimates do not include savings from Parks, Forestry and Recreation as these specific energy retrofit projects are still being finalized; therefore, the energy savings are still to be determined.

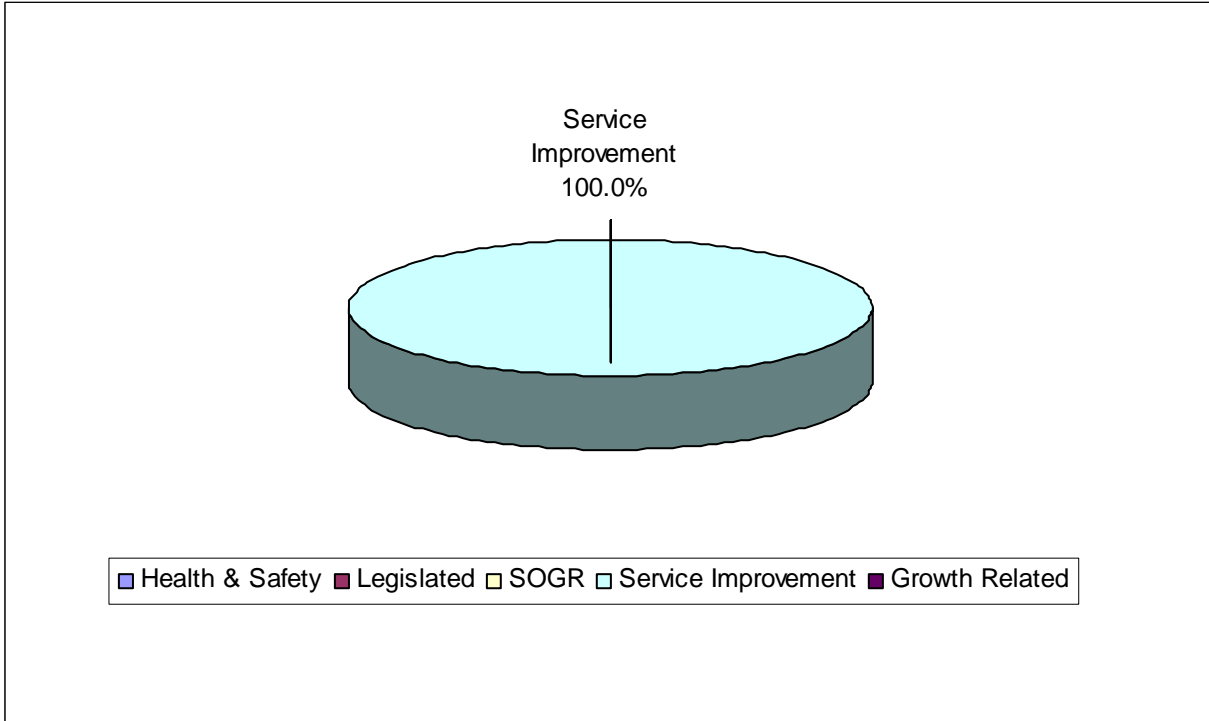
Total 2010 Recommended Cash Flow & Future Year Commitments

	2008 & Prior Year Carry Forwards	2010 Previously Approved Cash Flow Commitments	2010 New Cash Flow Rec'd	2010 Total Cash Flow Rec'd	2009 Carry Forwards	Total 2010 Cash Flow (Incl 2009 C/Fwd)	2011	2012	2013	2014	2015	2016	2017	2018	2019	Total Cost
Expenditures																
Previously Approved		26,856		26,856	6,253	33,109	23,242	18,884								75,235
Change in Scope			(3,533)	(3,533)		(3,533)	(3,452)	(1,578)								(8,563)
New																
New w/Future Year																
Total Expenditure		26,856	(3,533)	23,323	6,253	29,576	19,790	17,306								66,672
Financing																
Debt																0
Recoverable Debt		750		750	225	975	694									1,669
Other		250		250	75	325	231									556
Reserves/Res Funds		25,268	(3,533)	21,735	5,953	27,688	18,865	17,306								63,859
Development Charges																
ISF		588		588		588										588
Provincial/Federal																
Total Financing		26,856	(3,533)	23,323	6,253	29,576	19,790	17,306								66,672

- The Sustainable Energy Plan's 2010 Recommended Capital Budget is \$29.576 million and provides funding for 2009 projects carried forward into 2010 of \$6.253 million; previously approved 2010 commitment funding of \$26.856 million; and, \$(3.553) million for change in scope projects.
- Approval of the 2010 Recommended Capital Budget will result in a commitment to future year funding for change in scope projects of \$(3.452) million in 2011 and \$(1.578) million in 2012. The change in scope reflects fewer funds available for future year projects as a new forecast was done for loan repayments and interest to the Toronto Energy Conservation Fund and the Toronto Green Energy Fund.

2010 Recommended Capital Budget: Overview

Capital Budget by Project Category



100% of projects funded in the 2010 Recommended Capital Budget are for Service Improvement initiatives that will result in energy cost savings as well as reductions in greenhouse gas emissions.

2010 Recommended Capital Budget versus Debt Target

No debt target has been established for this program as no debt is required. Recoverable debt has been identified as a source of funds for the Energy Retrofit portion of the program, as energy savings will be utilized to repay the cost of debt servicing.

Capacity and Readiness to Proceed

Projects included in the 2010 Recommended Capital Budget are ready to proceed. Completion of the Parks, Forestry and Recreation facilities and Solid Waste Transfer station projects will conclude the Energy Retrofit Plan projects. Implementation of City Facilities Upgrades is ongoing and the Deep Lake Water Cooling project has been accelerated to meet ISF program guidelines.

The Program is committed to disburse 2010 budgeted loans from the Sustainable Energy Funds (SEF) and has received a lot of interest from the MASH and not-for-profit sector. Additionally, once the Provincial government finalizes and implements the Green Energy Act (announced in 2009) which hopes to boost investment in renewable energy projects and increase conservation, the demand for SEF should increase as renewable energy will become even more economically attractive.

Capital Project Highlights

The 2010 Recommended Capital Budget provides funding for projects that advance the strategic objectives of the Sustainable Energy Plan to advance the Mayor and Council priorities.

Climate Change Adaptation, Clean Air and Sustainable Energy Plan: The 2010 Recommended Capital Budget provides funding of \$20.723 million that directly contributes to advancing the goals outlined in the Action Plan by helping the City meet the greenhouse gas reduction targets established:

- Energy Retrofit Program (\$1.000 million) and energy retrofits at City Hall (\$1.565); and
- The Toronto Green Energy Fund (\$5.208 million) and the Toronto Energy Conservation Fund (\$9.619 million) to provide loans to the MASH sector for retrofits of facilities and investment in renewable energy technology.

A Cleaner and More Beautiful City: The 2010 Recommended Capital Budget provides \$2.600 million of funding for upgrades to City Hall to renew and improve our public spaces, including the redesign of Nathan Phillips Square.

The 2010 Recommended Capital Budget of \$23.323 million provides funding to:

- Begin energy retrofit projects at various Parks, Forestry and Recreation facilities that were not included in previous projects (\$1.000 million);
- Begin to implement the Deep Lake Water Cooling at Union Station (\$1.765 million);
- Continue to execute energy retrofits at City Hall (\$1.565 million) and realize significant progress on turning Nathan Phillips Square into a showcase for sustainability (\$2.600 million);
- Continue to provide loans from the Toronto Energy Conservation Fund (\$9.619 million) and the Toronto Green Energy Fund (\$5.208 million) to help the City meet renewable energy targets and goals regarding climate change and improving air quality; and
- Continue to focus on community energy planning (\$0.680 million) and using the Better Building Partnership program (\$0.886 million) to motivate the shift towards energy efficient technologies that will improve building performance.

PART II: ISSUES FOR DISCUSSION**2011-2019 Recommended Capital Plan Issues****Use of Loan Repayments and Interest Earned on Revolving Loans for Future Year Projects**

The 2011-2019 Recommended Capital Plan includes future year estimates for the Toronto Energy Conservation Fund and the Toronto Green Energy Fund that will be funded from the repayment of loans and interest earned from these funds. The amount of the loan repaid and the interest earned is dependent on the terms of the loan contract and when the funds are actually disbursed. Every year a reforecast will need to be completed which could either increase or decrease the amount of funds available. The Program has a solid plan for the use of the sustainable energy funds until 2012. A plan does not exist for the future years. For the 2011 Capital Budget process, the Program will submit a plan for the future years funding.

Energy Retrofit Program

The Energy Retrofit Program will be completed by 2011. The 2011-2019 Recommended Capital Plan does not include estimated funding for new projects but there are still many projects that could benefit from energy retrofit improvements. Under this program, Energy retrofit projects are funded by recoverable debt in which operating savings are used to repay the cost of debt servicing. For the 2011 Capital Budget process, the Program will request funding for any new projects that meet the recoverable debt pay back criteria.

Outstanding Issues from Prior Years' Budgets**Monitoring and Reporting Requirements**

During the 2009 Capital Budget process, the Energy Efficiency Office was requested to provide detailed monitoring and reporting of loan applications, project details and framework for costing; energy savings and criteria for pay back of loans. A list of applicants with repayment schedules as well as accepted applicants with funds pending to be disbursed was provided for the 2010 Budget Process. Staff from the Energy Efficiency Office, Corporate Finance and Financial Planning need to meet on a quarterly basis to review the status of the loans and the repayment schedules to provide a complete status of the Sustainable Energy Program in the annual capital budget process beginning in 2011.

Appendix 1
10-Year Recommended Capital Plan Project Summary

Appendix 2
2010 Recommended Capital Budget; 2011 to 2019
Capital Plan

Appendix 3
**2010 Recommended Cash Flow
And Future Year Commitments**

Appendix 4
2010 Recommended Capital Projects
With Financing Details

Appendix 5

Reserve / Reserve Fund Review

Reserve / Reserve Fund Name (In \$Thousands)	Projected Balance as at Dec. 31,	Proposed Withdrawals										2010 - 2019 Total	
		2010 Rec. Budget	2011 Plan	2012 Plan	2013 Plan	2014 Plan	2015 Plan	2016 Plan	2017 Plan	2018 Plan	2019 Plan		
XR1714 Strategic Infrastructure Partnership Reserve Fund	258,234.4	(19,342.0)	(16,940.0)	(13,000.0)									(49,282.0)
Total Reserve / Reserve Fund	258,234.4	(19,342.0)	(16,940.0)	(13,000.0)									(49,282.0)

Note: Withdrawals do not include Fund repayments, interest earned and Future Projects for TECF and TGF

Reserve / Reserve Fund Name (In \$Thousands)	Projected Balance as at Dec. 31,	Proposed Withdrawals										2010 - 2019 Total	
		2010 Rec. Budget	2011 Plan	2012 Plan	2013 Plan	2014 Plan	2015 Plan	2016 Plan	2017 Plan	2018 Plan	2019 Plan		
XR1052 Better Buildings Partnership Loan Repayment Reserve Fund	5,089.8	(886.0)	(973.0)	(1,067.0)	(1,131.0)	(1,153.0)	(1,246.0)	(1,344.0)	(1,471.0)				(9,271.0)
Total Reserve / Reserve Fund	5,089.8	(886.0)	(973.0)	(1,067.0)	(1,131.0)	(1,153.0)	(1,246.0)	(1,344.0)	(1,471.0)				(9,271.0)

Note: Loans will be paid back to the Fund