



City Budget
2013

Sustainable Energy Plan
Capital Budget Analyst Notes

The City of Toronto's budget is presented by program and service, in Analyst Note format. The City's Capital Budget funds major infrastructure.

2013 - 2022 Capital Program

2013 CAPITAL BUDGET ANALYST BRIEFING NOTES

BUDGET COMMITTEE NOVEMBER 29, 2012

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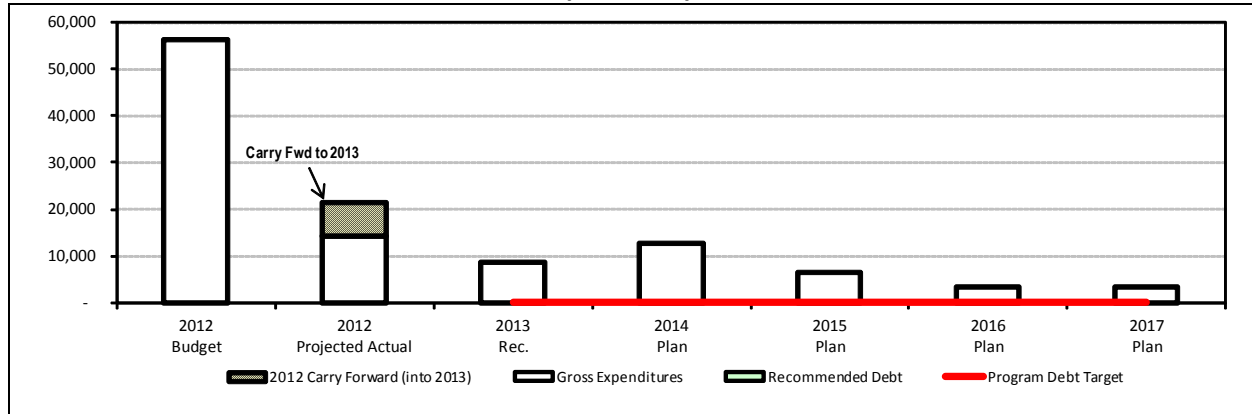
PART I: RECOMMENDATIONS

The City Manager and Acting Chief Financial Officer recommend that:

1. City Council approve the 2013 Recommended Capital Budget for the Sustainable Energy Plan with a total project cost of \$9.590 million, and 2013 cash flow of \$15.990 million and future year commitments of \$0.750 million comprised of the following:
 - a) New Cash Flow Funding for:
 - i) 3 new / change in scope sub-projects with a 2013 total project cost of \$9.590 million that requires cash flow of \$8.840 million in 2013 and a future year cash flow commitment of \$0.750 million in 2014; and,
 - b) 2012 approved cash flow for 3 previously approved sub-projects with carry forward funding from 2012 into 2013 totaling \$7.150 million.
2. City Council approve the 2014-2022 Recommended Capital Plan for the Sustainable Energy Plan totaling \$33.708 million in project estimates, comprised of \$12.247 million in 2014; \$6.746 million in 2015; \$3.544 million in 2016; \$3.571 million in 2017; \$1.600 million in 2018; \$1.500 million in 2019; \$1.500 million in 2020; \$1.500 million in 2021; and \$1.500 million in 2022.

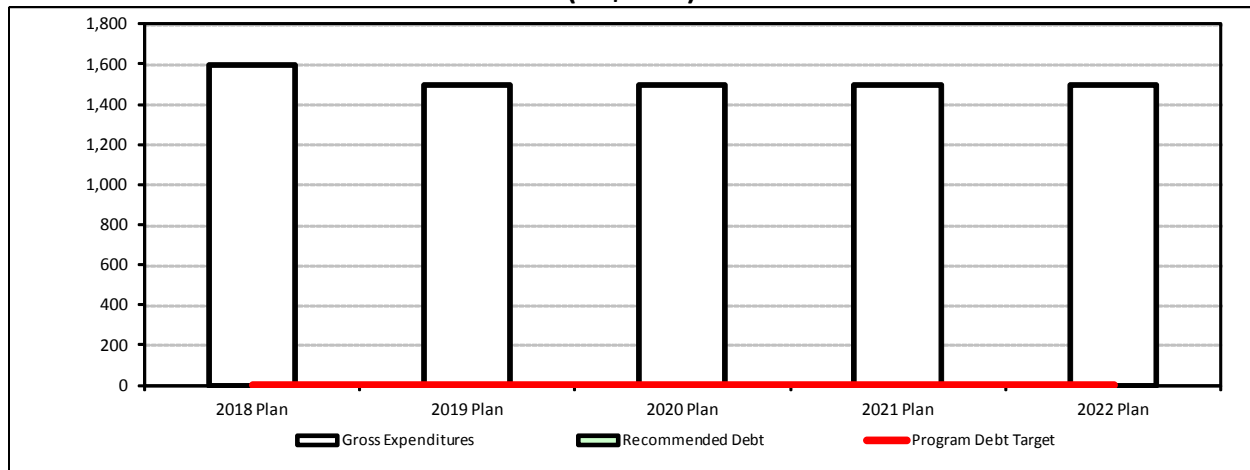
PART II: 2013 – 2022 CAPITAL PROGRAM

**10-Year Capital Plan
2013 Recommended Budget, 2014 - 2017 Recommended Plan
(In \$000s)**



	2012		2013 Rec. Budget and 2014-2017 Plan					5-Year Total Percent	
	Budget	Projected Actual	2013	2014	2015	2016	2017		2013-2017
Gross Expenditures:									
2012 Capital Budget & Approved FY Commitment	56,421	14,414							
Recommended Changes to Approved FY Commitments									
2013 New/Change in Scope and Future Year Commitments			8,840	750				9,590	26.9%
2014- 2017 Capital Plan Estimates				12,247	6,746	3,544	3,571	26,108	73.1%
2-Year Carry Forward for Reapproval									
1-Year Carry Forward to 2013		7,150							
Total Gross Annual Expenditures & Plan	56,421	14,414	8,840	12,997	6,746	3,544	3,571	35,698	100.0%
Program Debt Target	0								
Financing:									
Recommended Debt									
Reserves/Reserve Funds	54,595	12,790	1,131	1,153	1,246	1,344	1,471	6,345	17.8%
Development Charges Provincial/Federal									
Debt Recoverable	1,225	1,200	7,709	11,844	5,500	2,200	2,100	29,353	82.2%
Other Revenue	601	424							
Total Financing	56,421	14,414	8,840	12,997	6,746	3,544	3,571	35,698	100.0%
By Project Category:									
Health & Safety Legislated SOGR									
Service Improvement Growth Related	56,421	14,414	8,840	12,997	6,746	3,544	3,571	35,698	100.0%
Total by Project Category	56,421	14,414	8,840	12,997	6,746	3,544	3,571	35,698	100.0%
Asset Value (\$) at year-end									
Yearly SOGR Backlog Estimate (not addressed by current plan)									
Accumulated Backlog Estimate (end of year)									
Backlog: Percentage of Asset Value (%)									
Debt Service Costs									
Operating Impact on Program Costs									
New Positions									

**10-Year Capital Plan
2018-2022 Recommended Plan
(In \$000s)**



	2018-2022 Capital Plan						10-Year Total Percent
	2018	2019	2020	2021	2022	2013-2022	
Gross Expenditures:							
2012 Capital Budget & Approved FY Commitments							
Recommended Changes to Approved FY Commitments							
2013 New/Change in Scope and Future Year Commitments						9,590	22.1%
2018 - 2022 Capital Plan Estimates	1,600	1,500	1,500	1,500	1,500	33,708	77.9%
Total Gross Annual Expenditures & Plan	1,600	1,500	1,500	1,500	1,500	43,298	100.0%
Program Debt Target							
Financing:							
Recommended Debt							
Reserves/Reserve Funds						6,345	14.7%
Development Charges							
Provincial/Federal							
Debt Recoverable	1,600	1,500	1,500	1,500	1,500	36,953	85.3%
Other Revenue							
Total Financing	1,600	1,500	1,500	1,500	1,500	43,298	100.0%
By Project Category:							
Health & Safety							
Legislated							
SOGR							
Service Improvement	1,600	1,500	1,500	1,500	1,500	43,298	100.0%
Growth Related							
Total by Project Category	1,600	1,500	1,500	1,500	1,500	43,298	100.0%
Asset Value(\$) at year-end							
Yearly SOGR Backlog Estimate (not addressed by current plan)							
Accumulated Backlog Estimate (end of year)							
Backlog: Percentage of Asset Value (%)							
Debt Service Costs							
Operating Impact on Program Costs							
New Positions							

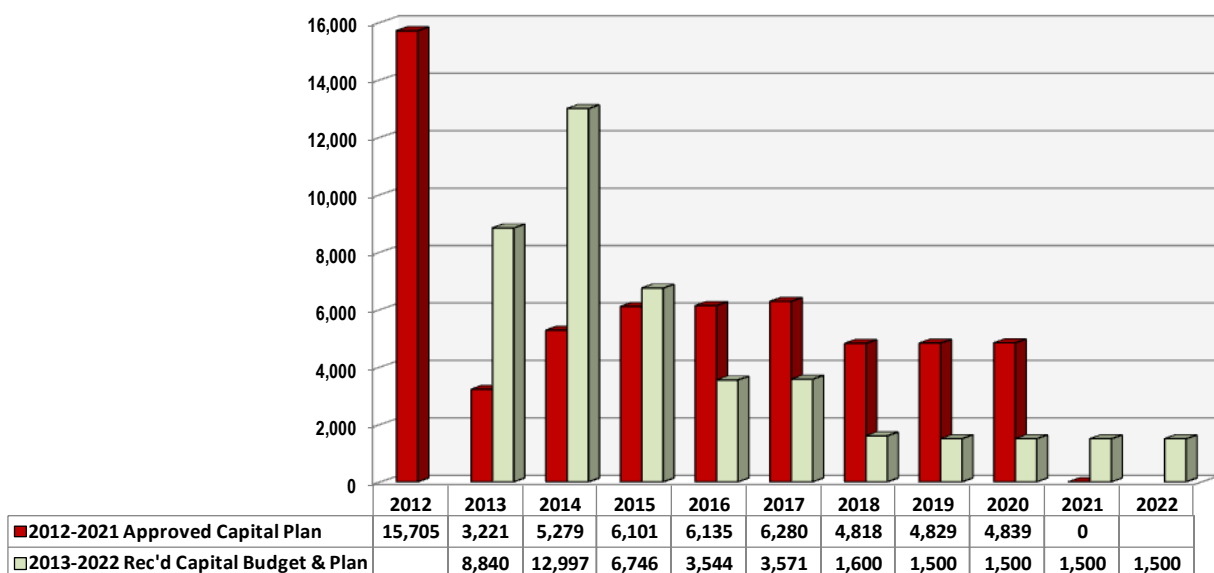
10-Year Capital Plan Overview

- The 10-Year Recommended Sustainable Energy Capital Plan provides funding to invest in local energy initiatives that maintain the City of Toronto as a world leader in the sustainable use of energy from local, clean and renewable sources.
- The 10-Year Recommended Capital Plan is consistent with the recommendations in the report entitled "Repurposing of the Sustainable Energy Funds and New Funding Model for City Energy Projects" considered by Executive Committee on November 19, 2012. The report recommends that loans to the Municipal, Academic, Social and Hospital (MASH) sector be discontinued and that the focus of energy projects should be in City-owned facilities. It also recommends that the reserve funding be re-directed for other purposes and new and future year energy projects be funded from recoverable debt.
 - The Executive Committee referred the report to Budget Committee for consideration during the 2013 Capital and Operating Budget deliberations. In addition the Executive Committee requested the City Manager to report back in the Spring of 2013 regarding energy conservation and energy efficiency best practices for both internal and external City programs and services.
- The 10-Year Recommended Capital Plan consists entirely of Service Improvement projects, funded through 87% recoverable debt, and 13% from Reserve Funds.
 - Debt is repaid by operating program energy savings and/or revenue generation as a result of energy efficiency initiatives.
 - It should be noted that the 10-Year Recommended Capital Plan includes three previously approved projects that require funding to be carried forward from 2012 to 2013, which are funded from the Sustainable Energy Reserve Funds.
- The 2013-2022 Recommended Capital Plan totals \$43.298 of which \$35.698 million or 82.4% is projected for the first 5 years and \$7.600 million or 17.6% required funding in the second five years.
- The 10-Year Recommended Capital Plan includes \$6.345 million in funding to continue the Better Building Partnership Program; \$11.750 million in funding to develop and initiate local Energy Retrofit Projects; \$5.000 million to advance District Energy Systems within the City; and \$20.203 to establish the Demand Response Program.
 - The Better Building Partnership Program (BBP) provides funding to public and non-profit sectors for building environmental and energy improvements which include reductions in greenhouse gas emissions and other harmful emissions. The BBP was created as part of the Canada Ontario Infrastructure Works Program, with funding received from Federal and Provincial levels of government to provide loans to public sector and non-profit building owners.
 - The Energy Retrofit Program provides funding for comprehensive energy efficiency upgrades and improvements to City facilities.

- The District Energy Systems Program integrates City energy assets together to produce significant financial and operational savings.
- The Demand Response Program provides electricity to balance province wide demand and supply capability during periods of electricity constraint as identified by the Independent Electricity System Operator. Through participation in this program, the City will be able to generate revenues from the availability of generators, as well as from curtailment and generation of electricity.

Key Changes to the 2012 - 2021 Approved Capital Plan

**Changes to the 2012 -2021 Approved Capital Plan
(In \$000s)**



The 2013 Recommended Capital Budget and the 2014 - 2022 Recommended Capital Plan reflects an increase of \$0.296 million or 0.7% from the 2012 to 2021 Approved Capital Plan. The changes to the 2012-2021 Approved Capital Plan reflect the discontinuation of the Toronto Energy Conservation and Toronto Green Energy Funds and the refocusing on energy projects within City facilities, funded from recoverable debt.

Details of changes to the 2012-2021 Recommended Capital Plan are noted below:

- The Toronto Energy Conservation Fund (TECF) and the Toronto Green Energy Fund will be discontinued. This has resulted in a decrease of \$35.157 million of available interest-free repayable loans to the municipal, academic, social, and healthcare sectors (MASH) and non-profit sectors.

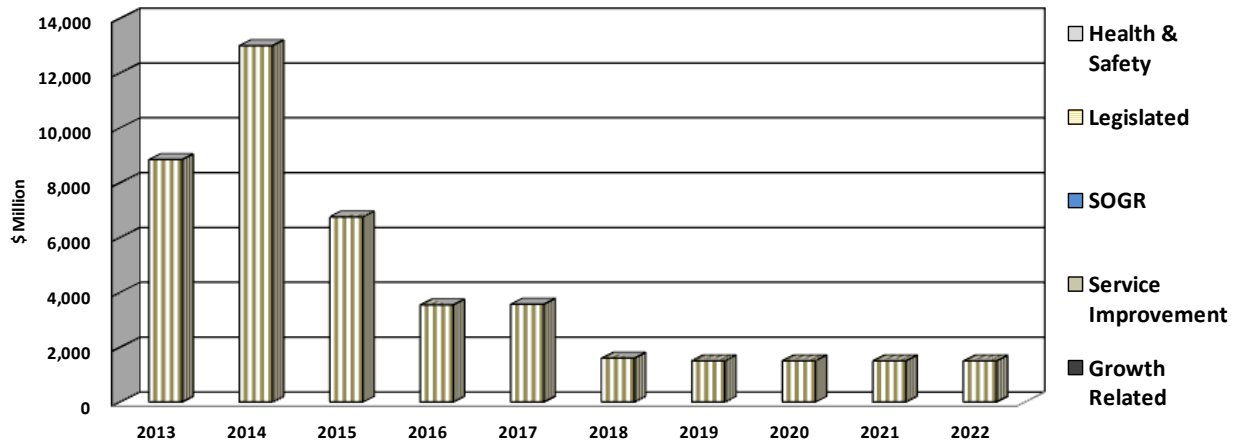
- The Sustainable Energy Plan has established three new energy projects for the City's divisions and agencies that are funded solely through recoverable debt with repayment from resulting operating program energy savings and/or revenue generation:
 - The Energy Retrofit Program includes a \$1.000 million investment (\$0.250 million in 2013 and \$0.750 million in 2014) for upgrades to major energy consuming equipment at the Booth Yard facility located at 433 Eastern Avenue. An additional \$10.750 million is projected for future year energy retrofit projects.
 - District Energy Systems Projects involve integrating City energy assets together to produce significant financial and operational savings. Three priority distributed energy node opportunities within the City of Toronto have been examined, namely Exhibition Place, Westwood Theatre Lands and the Scarborough Civic Centre, with another 27 potential sites identified. For 2014 and 2015, \$5.000 million was allocated for projects identified for the Scarborough Civic Centre and Westwood Theatre Lands in the 10-Year Recommended Capital Plan.
 - The Demand Response Program will provide an approach to coordinate the reduction of electricity demand to balance province wide demand and supply capability during periods of electricity constraint. Through upgrading existing or replacing diesel generators and peak shifting load management, local load curtailment will create a new net revenue stream utilizing existing City assets. This program is offered through the Ontario Power Authority. In 2013, the Demand Response Program will fund the upgrade and/or replacement of 28 generators estimated at \$7.459 million and an additional 31 generator upgrades expected in 2014 at \$7.244 million with future year installations occurring in 2015 to 2021.
- The following chart details the key project cash flow changes to the 2012 – 2021 Approved Capital Plan.

**Summary of Project Changes
(In \$000s)**

Key Projects	Total Project Cost	2013	2014	2015	2016	2017	2018	2019	2020	2021	2013 - 2021	Revised Total Project Cost
Previously Approved												
Toronto Energy Conservation Fund	27,118	(1,193)	(3,105)	(3,839)	(3,773)	(3,790)	(3,797)	(3,806)	(3,815)		(27,118)	0
Toronto Green Energy Fund	8,039	(897)	(1,021)	(1,016)	(1,018)	(1,019)	(1,021)	(1,023)	(1,024)		(8,039)	0
Total Previously Approved	35,157	(2,090)	(4,126)	(4,855)	(4,791)	(4,809)	(4,818)	(4,829)	(4,839)		(35,157)	0
New												
Energy Retrofit Projects - Booth Yard	1,000	250	750								1,000	1,000
Future Year Energy Retrofit Projects	10,750		1,250	1,500	1,500	1,500	1,000	1,000	1,000	1,000	9,750	10,750
Future Year District Energy Systems	5,000		2,600	2,400							5,000	5,000
Demand Response 2013	7,459	7,459									7,459	7,459
Future Year Demand Response	12,744		7,244	1,600	700	600	600	500	500	500	12,244	
Total New	36,953	7,709	11,844	5,500	2,200	2,100	1,600	1,500	1,500	1,500	35,453	24,209
Total Changes	72,110	5,619	7,718	645	(2,591)	(2,709)	(3,218)	(3,329)	(3,339)	1,500	296	24,209

2013 – 2022 Recommended Capital Plan

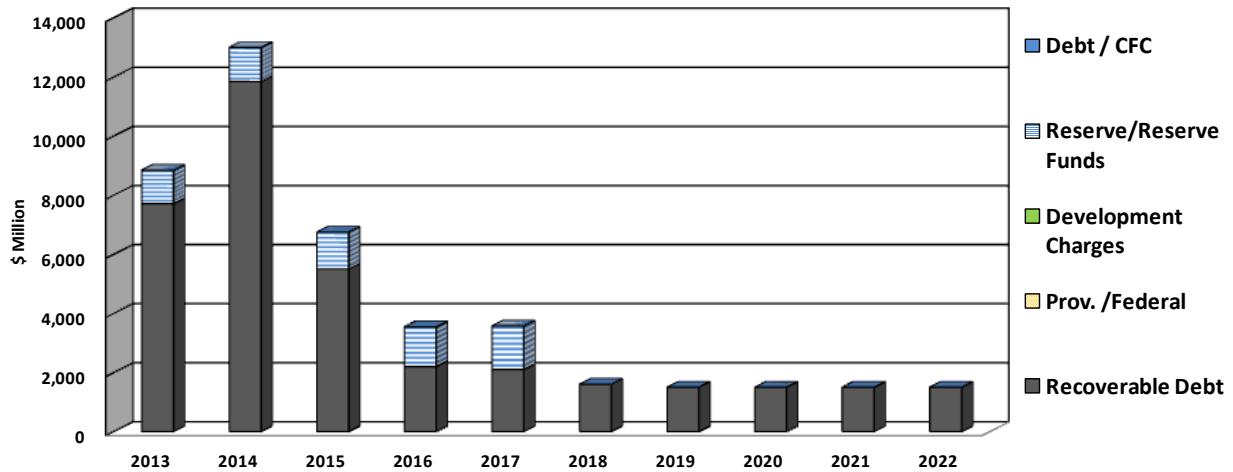
2013–2022 Capital Plan by Project Category
(In \$000s)



- All projects in the 2013 -2022 Recommended Capital Plan are categorized as Service Improvements totaling \$43.298 million.

 - \$35.698 million or 82.4% is allotted in the first five years of the 10-Year Recommended Capital Plan. Funding in the amount of \$17.603 million or 49.3% is included for the Demand Response Program during the first five years of the Capital Plan. In addition the Better Building Partnership Program of \$6.345 million, Energy Retrofit Projects that total \$6.750 million and District Energy Systems Projects of \$5.000 million are projected during this period.
 - \$7.600 million or 17.6% is allotted in years 6 to 10 of the 10-Year Recommended Capital Plan period and is attributable to the continuation of the Energy Retrofit Programs (\$5.000 million) and Demand Response Program (\$1.600 million).
 - It is expected that the Sustainable Energy Plan 10-Year Capital Plan will evolve as other energy projects are identified through studies. The planned expenditures of \$7.600 million in the latter 5 years of the 10-Year Recommended Capital Plan is anticipated to increase when other Energy Retrofit projects and District Systems projects are identified.

2013–2022 Capital Plan by Funding Source
(In \$000s)



The 10-Year Recommended Capital Plan of \$43.298 million will be financed by \$36.953 million of recoverable debt and \$6.345 million from Reserve / Reserve funds.

- Recoverable debt accounts for \$36.953 million or 85.3% of the financing of the 10-Year Recommended Capital Plan. Projects funded through recoverable debt are limited to tax supported, non-growth related projects that are expected to generate energy savings or generate revenue sufficient to offset a debt service schedule over the performance life of the asset. All debt must be repaid within 20 years.

 - Recoverable debt totals \$29.353 million or 82.2% of the total funding in the first five years.
 - The second five years requires \$7.600 million in recoverable debt or 100% of total funding.
- Reserve and Reserve Funds constitute \$6.345 million or 17.8% of required funding in the first 5 years.

 - The Better Building Partnership Reserve Fund is an independent revolving fund that supports projects that improve energy performance of buildings registered as non-profit or public sector organizations within the boundaries of the City of Toronto.

Major Capital Initiatives by Category

Summary of Major Capital Initiatives by Category
(In \$000s)

	Total Project Cost	2013 Rec. Budget	2014 Plan	2015 Plan	2016 Plan	2017 Plan	2018 Plan	2019 Plan	2020 Plan	2021 Plan	2022 Plan	2013-2022 Total
Service Improvements												
Energy Retrofit Projects	11,750	250	2,000	1,500	1,500	1,500	1,000	1,000	1,000	1,000	1,000	11,750
Better Building Partnership	6,345	1,131	1,153	1,246	1,344	1,471						6,345
District Energy Systems	5,000		2,600	2,400								5,000
Demand Response Program	20,203	7,459	7,244	1,600	700	600	600	500	500	500	500	20,203
Total	43,298	8,840	12,997	6,746	3,544	3,571	1,600	1,500	1,500	1,500	1,500	43,298

The 10-Year Recommended Capital Plan supports the Sustainable Energy Plan in reducing the City's greenhouse gas emissions and meeting energy reduction targets set by City Council. The Sustainable Energy Plan is a program of service improvement projects for City divisions and agencies that invest in energy conservation, efficiency, renewable and other strategic energy measures which result in a reduction in energy consumption or a tangible revenue stream for the City.

Service Improvement Projects

- The Energy Retrofit Program involves replacing and/or upgrading major energy consuming equipment within City facilities where substantial energy savings can be achieved. Energy Retrofit projects represent an attractive asset renewal and energy saving opportunity which includes a rate of return on capital, net new revenue for major equipment, as well as improving energy security to achieve environmental benefits. The 10-Year Recommended Capital Plan includes funding of \$11.750 million for this service improvement initiative.
- The 10-Year Recommended Capital Plan includes \$6.345 million for the Better Building Partnership Program that through collaboration between the City of Toronto and private business, provides resources and financial assistance to local non-profit organizations or public sector organizations to successfully implement energy efficiency measures in existing buildings and new construction.
- The District Energy Systems Program integrates City energy assets together to produce significant financial and operational savings. Modern district energy systems provide an opportunity to meet the demand and minimize energy waste, reduce energy costs, provide increased security of energy supply, and reduce the need for large scale central generation and reliance exclusively on grid transmission infrastructure. The 10-Year Recommended Capital Plan includes funding of \$5.000 million for this service improvement initiative.
- The Demand Response Program provides electricity to balance province wide demand and supply capability during periods of electricity constraint as identified by the Independent Electricity System Operator. Curtailment of loads and generation may incorporate Building Automation Systems, interior and/or exterior lighting modifications, and upgrades in HVAC (heating, ventilation, and air conditioning) systems. The 10-Year Recommended Capital Plan includes funding of \$20.203 million for these service improvement initiatives.

10-Year Capital Plan Impact on the Operating Budget

Approval of the 10-Year Recommended Capital Plan will result in energy cost savings and/or revenue generation in various City Programs and Agencies.

The savings and/or revenue generated will be used to repay the debt issued as a result of the program. Once the debt has been repaid, the program will realize net savings.

Savings/revenues will be realized from the following projects:

- Energy savings will be realized by Parks, Forestry and Recreation from the upgrades to the Booth Yard which will generate net energy savings in 2021 of \$0.127 million and \$0.208 million in 2022.
- The Demand Response Program will generate net revenue in 2014 of \$1.787 million; \$0.879 million in 2015; \$0.885 million in 2016; and \$0.892 million in 2017 for Facilities Management, Toronto Water and the Toronto Community Housing Corporation.
- These estimates do not include net savings from the District Energy Systems Program or future year Energy Retrofit and Demand Response projects as these programs are still being finalized; therefore, energy savings are still to be determined.

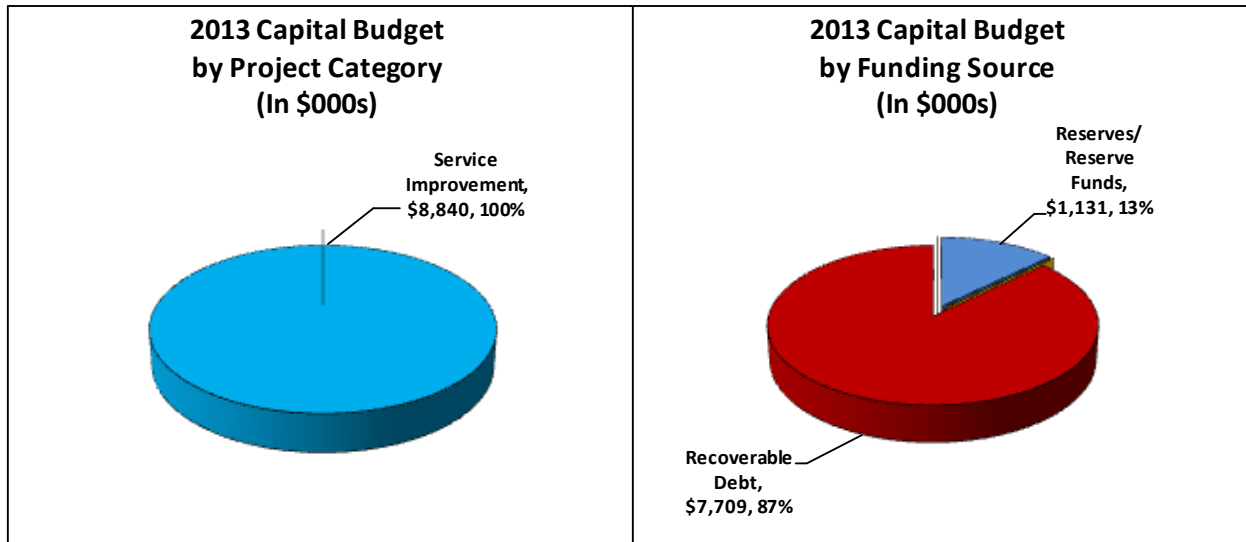
The table below indicates the timing and magnitude of the net savings/revenues as a result of the 10-Year Recommended Capital Plan.

Net Operating Impact by Project (In \$000s)

Project	2013 Rec. Budget		2014 Plan		2015 Plan		2016 Plan		2017 Plan		2013 - 2017 Capital		2018 - 2022 Capital Plan	
	\$000s	Pos.	\$000s	Pos.	\$000s	Pos.	\$000s	Pos.	\$000s	Pos.	\$000s	Pos.	\$000s	Pos.
New Projects - 2013														
Energy Retrofit Project at Booth Yard														(335)
Demand Response Program			(1,787)		(879)		(885)		(892)		(4,443)			(4,568)
Total Recommended (Net)			(1,787)		(879)		(885)		(892)		(4,443)			(4,903)

PART III - 2013 RECOMMENDED CAPITAL BUDGET

2013 Capital Budget by Project Category and Funding Source



The 2013 Recommended Capital Budget, excluding funding carried forward from 2012 to 2013, requires 2013 cash flow funding of \$8.840 million.

- The Program is fully comprised of Service Improvements totaling \$8.840 million, dedicated to reducing green house gas emissions and reducing energy usage.
 - The Energy Retrofit Project at Booth Yard was allocated \$0.250 million in 2013.
 - The Better Building Partnership Program was allocated \$1.131 million in 2013.
 - The Demand Response Program was allocated \$7.459 million in 2013.
- The 2013 Capital Budget for the Sustainable Energy Plan is funded primarily through recoverable debt, which accounts for 87% or \$7.709 million; the remaining funding of \$1.131 million or 13% is for the continuation of the Better Building Partnership Reserve Fund.

**2013 Recommended Cash Flow & Future Year Commitments
(In \$000s)**

	2011 & Prior Year Carry Forward	2012 Previously Approved Cash Flow Commitments	2013 New Cash Flow Rec'd	2013 Total Cash Flow Rec'd	2012 Carry Forwards	Total 2013 Cash Flow (Incl 2012 C/Fwd)	2014	2015	2016	2017	2018	2019	2020	2021	2022	Total Cost
Expenditures																
Previously Approved					7,150	7,150										7,150
Change in Scope																
New			8,840	8,840		8,840	750									9,590
New w/Future Year																
Total Expenditure			8,840	8,840	7,150	15,990	750									16,740
Financing																
Debt - recoverable			7,709	7,709		7,709	750									8,459
Other																
Reserves/Res Funds			1,131	1,131	7,150	8,281										8,281
Development Charges																
Provincial/Federal																
Total Financing			8,840	8,840	7,150	15,990	750									16,740

The Sustainable Energy 2013 Recommended Capital Budget is \$15.990 million and provides \$7.150 million in carry forward funding for previously approved projects, and \$8.840 million for new projects.

- All recommended new projects including Energy Retrofit projects (\$0.250 million), the Better Building Partnership (\$1.131) and Demand Response (\$7.459 million) are categorized as service improvements.
- Approval of the 2013 Recommended Capital Budget will result in future year commitments to cash flow funding of \$0.750 million in 2014 to complete the Energy Retrofit Project at Booth Yard (433 Eastern Avenue).

2013 Recommended Capital Project Highlights

The 2013 Recommended Capital Budget provides funding of \$15.990 million to:

- Complete the Solar Photo-Voltaic Program (\$4.000 million) for the remaining solar photo-voltaic installations on City buildings in partnership with Toronto Hydro.
- Continue Community Energy Planning (\$2.150 million) to complete community energy studies, conduct workshops and seek partnerships to identify energy initiatives in support of the Sustainable Energy Plan.
- Continue the Better Building Partnership Program (\$1.131 million) to reduce energy usage and green house gas emissions.
- Begin the Energy Retrofit Project at Booth Yard (\$0.250 million in 2013; \$0.750 million in 2014) for the upgrade of various energy assets.
- Begin the Demand Response Program (\$7.459 million) with the installation and/or upgrade of twenty-eight (28) diesel generators across City facilities.

**2013 Recommended Capital Project Highlights
(In \$000s)**

Project	Total Project Cost	2013	2014	2015	2016	2017	2013 - 2017	2018	2019	2020	2021	2022	2013 - 2022 Total
Energy Retrofit Projects	1,000	250	750				1,000						1,000
Toronto Energy Conservation Fund	1,000	1,000					1,000						1,000
Better Buildings Partnership	1,131	1,131					1,131						1,131
Community Energy Planning	2,150	2,150					2,150						2,150
Solar Photovoltaic Program	4,000	4,000					4,000						4,000
Demand Response Program	7,459	7,459					7,459						7,459
Total (including carry forward funding)	16,740	15,990	750				16,740						16,740

PART IV: ISSUES FOR DISCUSSION

Issues Referred to the 2013 Capital Budget Process

Status of the Sustainable Energy Program

- At its Special Meeting on September 26 and 27, 2011, City Council approved the report "Core Service Review – Final Report to Executive Committee" from the City Manager. Although the report did not specifically address the Sustainable Energy Plan, Council did direct the City Manager to consolidate and reduce environmental services within the City of Toronto.
- During the 2012 Capital Budget process, the Deputy City Manager and Chief Financial Officer had been directed to report to Council on the viability of continuing the Sustainable Energy Fund program.
 - To respond to the viability of continuing the Sustainable Energy Program, the report entitled "Repurposing of the Sustainable Energy Funds and New Funding Model for City Energy Projects" was considered by the Executive Committee on November 19, 2012. The Executive Committee referred the report to Budget Committee for consideration during the 2013 Capital and Operating Budget deliberations. In addition the Executive Committee requested the City Manager to report back in the Spring of 2013 regarding energy conservation and energy efficiency best practices for both internal and external City programs and services.
- The 10-Year Recommended Capital Plan is consistent with the recommendations in the repurposing report, noted above. The report recommends that the Toronto Energy Conservation Fund and Toronto Green Energy Fund be discontinued. These are revolving loan funds provided to the MASH sector. The report recommends that the Sustainable Energy Plan focus on energy efficiency projects within City facilities, funded from recoverable debt.

Appendix 1

2012 Performance

2012 Key Accomplishments

In 2012, the Sustainable Energy Plan Program accomplished the following:

- ✓ Achieved \$2.100 million in energy savings in the past three years from the implementation of various Sustainable Energy Plan initiatives and projects.
- ✓ Completed the City Hall East Tower Window Replacement Project and commenced work on the West Tower; expected to be completed by the end of 2012.
- ✓ Distributed approximately \$6.000 million in funds from the Sustainable Energy Reserve Funds to multi-family residential buildings operated by the Toronto Community Housing Corporation for the implementation of a variety of energy efficiency projects.
- ✓ Completed the Deep Lake Water Cooling project at Union Station.
- ✓ Commenced the Solar Photo-Voltaic project in cooperation with Toronto Hydro; approximately four installations nearing completion, and additional sites are scheduled to begin in 2013.
- ✓ Completed detailed district energy and renewable energy studies that resulted in the creation of:
 - The District Energy System at Exhibition Place.
 - The Energy Retrofit Project at Booth Yard (433 Eastern Avenue).
 - The Demand Response Program.

2012 Capital Variance Review

2012 Budget to Actual Comparison (In \$000s)

2012 Approved	Actuals as of Sept. 30, 2012 (3rd Quarter Variance)		Projected Actuals at Year End		Unspent Balance	
	\$	% Spent	\$	% Spent	\$ Unspent	% Unspent
56,421	2,866	5.1%	14,414	25.5%	42,007	74.5%

Capital expenditures for the period ending September 30th, 2012 totaled \$2.866 million or 5.1% of the 2012 Approved Capital Budget of \$56.421 million. The Program is projecting spending of \$14.414 million or 25.5% of the 2012 Approved Capital Budget by year-end.

- The Toronto Energy Conservation Fund and the Toronto Green Energy Fund are projected to be under spent by \$21.058 million and \$10.945 million respectively. In addition, the Solar Photo-Voltaic program is projecting under expenditures of \$4.000 million by year end. The Community Energy Planning project is also projected to be under spent by \$2.150 million.
- The following projects are expected to carry funding forward into 2013:
 - \$1.000 million of funding will be available for the completion of the Parks Phase 4 Retrofits project.
 - \$2.150 million for the Community Energy Planning project to fund planning and research studies for energy efficiency programs.
 - \$4.000 million to complete the Solar Photo-Voltaic program.
- Of the \$42.007 million projected to be unspent, \$39.200 million is funded through the Sustainable Energy Reserve Funds, \$0.027 million from the Strategic Infrastructure Reserve, \$2.603 million from the Better Building Partnership Reserve Fund and \$0.177 million funded through other funding sources.
 - \$7.150 million of funding from the Toronto Energy Conservation Fund carried forward into 2013 from 2012 to fund the three aforementioned projects and the remaining planned \$25.853 million from the Sustainable Energy Reserve Funds will be available to fund other City initiatives, as per the report entitled "Repurposing of the Sustainable Energy Funds and New Funding Model for City Energy Projects".

Appendix 2

10-Year Recommended Capital Plan Project Summary (In \$000s)

Project	2013	2014	2015	2016	2017	2013 - 2017	2018	2019	2020	2021	2022	2013 - 2022
Energy Retrofit Projects	250	2,000	1,500	1,500	1,500	6,750	1,000	1,000	1,000	1,000	1,000	11,750
Toronto Energy Conservation Fund	1,000					1,000						1,000
Better Buildings Partnership	1,131	1,153	1,246	1,344	1,471	6,345						6,345
Community Energy Planning	2,150					2,150						2,150
Solar Photovoltaic Program	4,000					4,000						4,000
District Energy Systems		2,600	2,400			5,000						5,000
Demand Response Program	7,459	7,244	1,600	700	600	17,603	600	500	500	500	500	20,203
Total (including carry forwards)	15,990	12,997	6,746	3,544	3,571	42,848	1,600	1,500	1,500	1,500	1,500	50,448

Appendix 3

**2013 Recommended Capital Budget;
2014 to 2022 Capital Plan**

CITY OF TORONTO

**Gross Expenditures (\$000's)
Appendix 3**

Sustainable Energy Plan

Sub- Project No. Project Name PrioritySubProj No. Sub-project Name Ward Stat. Cat.						Current and Future Year Cash Flow Commitments							Current and Future Year Cash Flow Commitments Financed By													
						2013	2014	2015	2016	2017	Total 2013-2017	Total 2018-2022	Total 2013-2022	Provincial Grants and Subsidies	Federal Subsidy	Development Charges	Reserves	Reserve Funds	Capital from Current	Other 1	Other2	Debt - Recoverable Debt	Total Financing			
ERP906993 Energy Retrofit Projects																										
0	17	Energy Retrofit Projects - Booth Yard	30	S4	04	250	750	0	0	0	1,000	0	1,000	0	0	0	0	0	0	0	0	0	0	1,000	1,000	
0	18	Energy Retrofit Projects - Future Years	CW	S6	04	0	1,250	1,500	1,500	1,500	5,750	5,000	10,750	0	0	0	0	0	0	0	0	0	0	10,750	10,750	
Sub-total						250	2,000	1,500	1,500	1,500	6,750	5,000	11,750	0	0	0	0	0	0	0	0	0	0	11,750	11,750	
ERP907303 Toronto Energy Conservation Fund																										
0	1	Toronto Energy Conservation Fund	CW	S2	04	1,000	0	0	0	0	1,000	0	1,000	0	0	0	0	1,000	0	0	0	0	0	0	1,000	
Sub-total						1,000	0	0	0	0	1,000	0	1,000	0	0	0	0	1,000	0	0	0	0	0	0	1,000	
ERP907307 Better Buildings Partnership																										
0	3	BBP - Future Year Projects	CW	S6	04	0	1,153	1,246	1,344	1,471	5,214	0	5,214	0	0	0	0	5,214	0	0	0	0	0	0	5,214	
0	8	Better Buildings Partnership 2013	CW	S4	04	1,131	0	0	0	0	1,131	0	1,131	0	0	0	0	1,131	0	0	0	0	0	0	1,131	
Sub-total						1,131	1,153	1,246	1,344	1,471	6,345	0	6,345	0	0	0	0	6,345	0	0	0	0	0	0	6,345	
ERP907354 Sustainable Energy Plan - Various																										
0	1	Community Energy Planning	CW	S2	04	2,150	0	0	0	0	2,150	0	2,150	0	0	0	0	2,150	0	0	0	0	0	0	2,150	
Sub-total						2,150	0	0	0	0	2,150	0	2,150	0	0	0	0	2,150	0	0	0	0	0	0	2,150	
ERP907661 Renewable Energy Program																										
0	1	Solar Photovoltaic Program	CW	S2	04	4,000	0	0	0	0	4,000	0	4,000	0	0	0	0	4,000	0	0	0	0	0	0	4,000	
Sub-total						4,000	0	0	0	0	4,000	0	4,000	0	0	0	0	4,000	0	0	0	0	0	0	4,000	
ERP907832 District Energy Systems																										
0	2	District Energy Systems - Future Projects	CW	S6	04	0	2,600	2,400	0	0	5,000	0	5,000	0	0	0	0	0	0	0	0	0	0	5,000	5,000	
Sub-total						0	2,600	2,400	0	0	5,000	0	5,000	0	0	0	0	0	0	0	0	0	0	0	5,000	5,000
ERP907833 Demand Response Program																										
0	1	Demand Response - 2013	CW	S4	04	7,459	0	0	0	0	7,459	0	7,459	0	0	0	0	0	0	0	0	0	0	7,459	7,459	
0	2	Demand Response - Future Years	CW	S6	04	0	7,244	1,600	700	600	10,144	2,600	12,744	0	0	0	0	0	0	0	0	0	0	12,744	12,744	
Sub-total						7,459	7,244	1,600	700	600	17,603	2,600	20,203	0	0	0	0	0	0	0	0	0	0	0	20,203	20,203
Total Program Expenditure						15,990	12,997	6,746	3,544	3,571	42,848	7,600	50,448	0	0	0	0	13,495	0	0	0	0	0	0	36,953	50,448

Report Phase 2 - Program 48 Sustainable Energy Plan Program Phase 2 Sub-Project Category 01,02,03,04,05,06,07 Part B Sub-Project Status S2,S5,S6 Part C Sub-Project Status S2,S3,S4

CITY OF TORONTO

Gross Expenditures (\$000's)

Appendix 3

Sustainable Energy Plan

Sub- Project No. Project Name Priority SubProj No. Sub-project Name Ward Stat. Cat.						Current and Future Year Cash Flow Commitments and Estimates						Current and Future Year Cash Flow Commitments and Estimates Financed By								
						2013	2014	2015	2016	2017	Total 2013-2017	Total 2018-2022	Total 2013-2022	Provincial Grants and Subsidies	Federal Subsidy	Development Charges	Reserve Reserves	Reserve Funds	Capital from Current	Other 1
Financed By:																				
Reserve Funds (Ind."XR" Ref.)						8,281	1,153	1,246	1,344	1,471	13,495	0	13,495	0	0	0	0	0	0	13,495
Other2 (External)						0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Debt - Recoverable						7,709	11,844	5,500	2,200	2,100	29,353	7,600	36,953	0	0	0	0	0	36,953	
Total Program Financing						15,990	12,997	6,746	3,544	3,571	42,848	7,600	50,448	0	0	0	0	0	36,953	50,448

Status Code	Description
S2	S2 Prior Year (With 2013 and/or Future Year Cashflow)
S3	S3 Prior Year - Change of Scope 2013 and/or Future Year Cost(Cashflow)
S4	S4 New - Stand-Alone Project (Current Year Only)
S5	S5 New (On-going or Phased Projects)
S6	S6 New - Future Year (Commencing in 2014 & Beyond)

Category Code	Description
01	Health and Safety C01
02	Legislated C02
03	State of Good Repair C03
04	Service Improvement and Enhancement C04
05	Growth Related C05
06	Reserved Category 1 C06
07	Reserved Category 2 C07

Appendix 4
2013 Recommended Cash Flow and
Future Year Commitments

CITY OF TORONTO

**Gross Expenditures (\$000's)
Appendix 4**

Sustainable Energy Plan

Sub- Project No. Project Name PrioritySubProj No. Sub-project Name Ward Stat. Cat.						Current and Future Year Cash Flow Commitments							Current and Future Year Cash Flow Commitments Financed By											
						2013	2014	2015	2016	2017	Total 2013-2017	Total 2018-2022	Total 2013-2022	Provincial Grants and Subsidies	Federal Subsidy	Development Charges	Reserves	Reserve Funds	Capital from Current	Other 1	Other2	Debt - Recoverable Debt	Total Financing	
<u>ERP906993 Energy Retrofit Projects</u>																								
0	17	Energy Retrofit Projects - Booth Yard	30	S4	04	250	750	0	0	0	1,000	0	1,000	0	0	0	0	0	0	0	0	1,000	1,000	
Sub-total						250	750	0	0	0	1,000	0	1,000	0	0	0	0	0	0	0	0	1,000	1,000	
<u>ERP907303 Toronto Energy Conservation Fund</u>																								
0	1	Toronto Energy Conservation Fund	CW	S2	04	1,000	0	0	0	0	1,000	0	1,000	0	0	0	0	1,000	0	0	0	0	1,000	
Sub-total						1,000	0	0	0	0	1,000	0	1,000	0	0	0	0	1,000	0	0	0	0	1,000	
<u>ERP907307 Better Buildings Partnership</u>																								
0	8	Better Buildings Partnership 2013	CW	S4	04	1,131	0	0	0	0	1,131	0	1,131	0	0	0	0	1,131	0	0	0	0	1,131	
Sub-total						1,131	0	0	0	0	1,131	0	1,131	0	0	0	0	1,131	0	0	0	0	1,131	
<u>ERP907354 Sustainable Energy Plan - Various</u>																								
0	1	Community Energy Planning	CW	S2	04	2,150	0	0	0	0	2,150	0	2,150	0	0	0	0	2,150	0	0	0	0	2,150	
Sub-total						2,150	0	0	0	0	2,150	0	2,150	0	0	0	0	2,150	0	0	0	0	2,150	
<u>ERP907661 Renewable Energy Program</u>																								
0	1	Solar Photovoltaic Program	CW	S2	04	4,000	0	0	0	0	4,000	0	4,000	0	0	0	0	4,000	0	0	0	0	4,000	
Sub-total						4,000	0	0	0	0	4,000	0	4,000	0	0	0	0	4,000	0	0	0	0	4,000	
<u>ERP907833 Demand Response Program</u>																								
0	1	Demand Response - 2013	CW	S4	04	7,459	0	0	0	0	7,459	0	7,459	0	0	0	0	0	0	0	0	7,459	7,459	
Sub-total						7,459	0	0	0	0	7,459	0	7,459	0	0	0	0	0	0	0	0	0	7,459	7,459
Total Program Expenditure						15,990	750	0	0	0	16,740	0	16,740	0	0	0	0	8,281	0	0	0	0	8,459	16,740

CITY OF TORONTO

Gross Expenditures (\$000's)

Appendix 4

Sustainable Energy Plan

Sub- Priority	Project No. SubProj No.	Project Name Sub-project Name	Ward	Stat.	Cat.	Current and Future Year Cash Flow Commitments and Estimates						Current and Future Year Cash Flow Commitments and Estimates Financed By									
						2013	2014	2015	2016	2017	Total 2013-2017	Total 2018-2022	Total 2013-2022	Provincial Grants and Subsidies	Federal Subsidy	Development Charges	Reserve Reserves	Reserve Funds	Capital from Current	Other 1	Other2
Financed By:																					
		Reserve Funds (Ind."XR" Ref.)				8,281	0	0	0	0	8,281	0	8,281	0	0	0	0	0	0	0	8,281
		Other2 (External)				0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		Debt - Recoverable				7,709	750	0	0	0	8,459	0	8,459	0	0	0	0	0	0	8,459	8,459
Total Program Financing						15,990	750	0	0	0	16,740	0	16,740	0	0	0	0	0	0	8,459	16,740

Status Code	Description
S2	S2 Prior Year (With 2013 and/or Future Year Cashflow)
S3	S3 Prior Year - Change of Scope 2013 and/or Future Year Cost(Cashflow)
S4	S4 New - Stand-Alone Project (Current Year Only)
S5	S5 New (On-going or Phased Projects)

Category Code	Description
01	Health and Safety C01
02	Legislated C02
03	State of Good Repair C03
04	Service Improvement and Enhancement C04
05	Growth Related C05
06	Reserved Category 1 C06
07	Reserved Category 2 C07

Appendix 5

2013 Recommended Capital Project with Financing Details

(Phase 2) 48-Sustainable Energy Plan Sub-Project Category: 01,02,03,04,05,06,07 Type: B Sub-Project Status: S2 Type: C Sub-Project Status: S2,S3,S4,S5



CITY OF TORONTO

Appendix 5

**Sustainable Energy Plan
Sub-Project Summary**

Project/Financing

Priority Project Project Name

Priority Project	Project Name	Start Date	Completion Date	2013	Financing									
				Cash Flow	Provincial Grants Subsidies	Federal Subsidy	Developmt Charges	Reserves	Reserve Funds	Capital From Current	Other 1	Other 2	Debt	Debt - Recoverable
0	<u>ERP906993 Energy Retrofit Projects</u>													
0	17 Energy Retrofit Projects - Booth Yard	01/01/2013	31/12/2014	250	0	0	0	0	0	0	0	0	0	250
	Project Sub-total:			250	0	0	0	0	0	0	0	0	0	250
0	<u>ERP907303 Toronto Energy Conservation Fund</u>													
0	1 Toronto Energy Conservation Fund	01/01/2008	31/12/2013	1,000	0	0	0	0	1,000	0	0	0	0	0
	Project Sub-total:			1,000	0	0	0	0	1,000	0	0	0	0	0
0	<u>ERP907307 Better Buildings Partnership</u>													
0	8 Better Buildings Partnership 2013	01/01/2013	31/12/2013	1,131	0	0	0	0	1,131	0	0	0	0	0
	Project Sub-total:			1,131	0	0	0	0	1,131	0	0	0	0	0
0	<u>ERP907354 Sustainable Energy Plan - Various</u>													
0	1 Community Energy Planning	01/01/2009	31/12/2012	2,150	0	0	0	0	2,150	0	0	0	0	0
	Project Sub-total:			2,150	0	0	0	0	2,150	0	0	0	0	0
0	<u>ERP907661 Renewable Energy Program</u>													
0	1 Solar Photovoltaic Program	01/01/2010	31/12/2013	4,000	0	0	0	0	4,000	0	0	0	0	0
	Project Sub-total:			4,000	0	0	0	0	4,000	0	0	0	0	0
0	<u>ERP907833 Demand Response Program</u>													
0	1 Demand Response - 2013	01/01/2013	31/12/2014	7,459	0	0	0	0	0	0	0	0	0	7,459
	Project Sub-total:			7,459	0	0	0	0	0	0	0	0	0	7,459
Program Total:				15,990	0	0	0	0	8,281	0	0	0	0	7,709

Status Code	Description
S2	S2 Prior Year (With 2013 and/or Future Year Cashflow)
S3	S3 Prior Year - Change of Scope 2013 and/or Future Year Cost(Cashflow)
S4	S4 New - Stand-Alone Project (Current Year Only)
S5	S5 New (On-going or Phased Projects)

Category Code	Description
01	Health and Safety C01
02	Legislated C02
03	State of Good Repair C03
04	Service Improvement and Enhancement C04
05	Growth Related C05
06	Reserved Category 1 C06
07	Reserved Category 2 C07

Appendix 6

**2013 Reserve / Reserve Fund Review
(In \$000s)**

Reserve/Reserve Fund Review - Program Specific

Reserve / Reserve Fund Name	Project / SubProject Name and Number	Projected Balance as at Dec 31, 2012 *	Contributions / (Withdrawals)										2013- 2022 Total Contributions / (Withdrawals)				
			2013 Rec. Budget	2014 Plan	2015 Plan	2016 Plan	2017 Plan	2018 Plan	2019 Plan	2020 Plan	2021 Plan	2022 Plan					
Better Building Partnership (XR1052)	Beginning Balance as of Jan. 1, 2013 Contributions / (Withdrawals) Better Building Partnership Program	3,853															
			1,131	1,153	1,246	1,344	1,471										6,345
Total Reserve Fund Balance at Year-End		3,853	1,131	1,153	1,246	1,344	1,471										6,345

* Based on the 3rd Quarter Variance Report