

Waste Management Utility

Introduction

The Waste Management Utility is a leader in urban waste solutions and delivers waste management services to the residential and non-residential sectors under two main areas of operation: Collection Services and Processing and Disposal Services.

The City's integrated waste management system contributes to a number of City Councils' strategic goals. In particular, the Utility plays a pivotal role in preserving and sustaining Edmonton's environment. The Utility's environmental advocacy, stewardship, preservation and conservation activities, and its partnerships with citizens, communities and organizations improve Edmonton's environmental health.

The consistent delivery of responsive services and a commitment to customer engagement have enabled a strong partnership with residents. This partnership is reflected in the 5,000 volunteer hours contributed each year by residents, and the high rates of voluntary participation in waste reduction, reuse and recycling.

The Waste Management Utility also contributes to Improving Edmonton's livability by creating a safe and clean city. Moreover, the Utility is supporting the diversification of the City's economy by attracting new green businesses such as Global Electric and Electronic Processing (GEEP), Greys Paper Recycling Inc. and Enerkem Alberta Biofuels.



An operational review by the Utility, an independent Cost of Services Study, as well as the Waste Management Utility Audit conducted by the Office of the City Auditor all illustrate a well managed Utility in its formative years.

Vision:

To be a customer-driven world leader in sustainable and innovative waste management.

Mission:

To provide waste management services for the City of Edmonton with due regard to the needs of residents, the preservation of natural resources, the protection of the environment and the financial capabilities of the City.

Opportunities and Challenges

Opportunity

1. Provision of Weekly Collection Service

The Waste Management Utility 2012-2014 Business Plan provides for the change to year-round weekly collection services delivered on the same day of the week. This change supports optimal utilization of resources and does not require any additional increase in customer rates. The current collection service model requires scheduling changes from winter to non-winter months and changes in the day of collection with every statutory holiday throughout the year.

Outcome: Operations are well managed and sustainable

Challenges: The proposed service requires a minimum 85% fleet availability. The Waste Management Utility and Fleet Services will meet this requirement by the end of 2011.

Action/Timeline: The change would be effective January 1, 2013 with the start of new collection contracts that cover half of the City. The current collection contract based on existing service levels ends at this time. Planning for the change will be done in 2012.

Challenges

1. Achieving Long Term Financial Sustainability in Accordance with Policy C558

Outcome: Operations are well managed and sustainable.

Challenge: On June 1, 2011 Council approved Policy C558, which sets out Financial Indicators Targets (FIT) that would lead to a financially sustainable utility.

Given that the Utility has been established only since January 1, 2009, and the closure of the Clover Bar Landfill in August 2009 necessitated a fundamental change to the provision of waste services, the Utility is not expected to achieve the FIT in the short term.

Action and Timeframe: The proposed 2012 Budget will eliminate the necessity of accessing Retained Earnings to subsidize the actual cost of service (over 2009-2011 forecast, \$16.1 million has been accessed or forecasted to be accessed). The Debt Coverage Ratio and Debt to Net Asset Ratio are targeted to steadily improve annually. The Return on Rate Base Ratio is expected to take 5 years to reach the minimum target. The proposed 2012 Budget and 10-year financial forecast represent a balanced approach to making positive strides on the Utility Fiscal Policy with due regard to customer rates. The need to eliminate reliance on Retained Earnings accounts for \$1.00 of the

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total proposed monthly increase of \$1.86.

2. Capital Investments - Continued Implementation of Processing and Hauling Systems

Outcome: Leadership is demonstrated in reducing impacts on the environment.

Challenge: The change to an integrated processing operation that focuses on diversion and reduces the need for hauling to a distant landfill has necessitated above normal capital investment over the past five years. These investments required capital financing and operational impacts that are higher than in the past when relatively cheap landfill capacity was available in the City of Edmonton.

Action and Timeframe: New facilities owned by the Utility have been completed or are anticipated to be completed in 2012:

- Completed 2010 - Phase 1 (tip floor) and Phase 2 (pre-processing to separate organic material for composting) of the Integrated Processing and Transfer Facility.
- Scheduled for commissioning in fall 2011 - Advanced Energy Research Facility (largely funded by a grant from Alberta Innovates-Energy and Environment Solutions) and the Commingled Construction and Demolition Waste Processing Facility.
- Targeted for completion in 2012 - Phase 3 of the Integrated Processing and Transfer Facility to produce refuse-derived feedstock for Enerkem's Alberta Biofuels Facility which is expected to be fully commissioned by the end 2014. The approximate 24-month delay in the Biofuels Facility reflects longer than anticipated time to finalize improved process design in detailed engineering drawings and manufacture process equipment.

This, along with operating impacts of other capital investments account for \$0.27 of the proposed \$1.86 monthly increase.

3. Low Volume Generator Program

Outcome: Leadership is demonstrated in reducing impacts on the environment. The Program provides financial benefit to residents who produce and set out less waste for collection.

Challenge: The challenge in implementing this program is in providing a financial incentive to customers who produce less waste without reducing the overall revenue to the Utility.

Action and Timeframe: At the September 1 meeting of the Utility Committee, the Waste Management Utility was directed to develop a public consultation plan for delivery in early 2012. The consultation plan will be presented to Utility Committee for consideration at their first meeting in 2012.

4. Detailed Examination of Operations

Outcome: Operations are well managed and sustainable.

Challenge: Optimizing operations in an environment in which some cost drivers are uncontrollable, e.g. the price of fuel.

Action and Timeframe: Operating costs (activities) that are directly controlled by the Utility were examined in detail and optimized. This results in \$0.38 of the proposed rate increase being related to increased operating costs in 2012 and is less than inflation.

5. Diversion of Non-Residential (Non-Regulated) Waste from Landfill

Outcome: Leadership is demonstrated in reducing impacts on the environment.

Challenge: Non-residential waste is unregulated and therefore the Waste Management Utility does not control the processing and disposal options for this waste stream. The choice of disposal method is at the discretion of the generator and/or their contracted waste hauler.

Action and Timeframe: Two approaches are being pursued to influence non-residential waste diversion. With availability of the Commingled Construction and Demolition Waste Facility, the Utility now has the ability to actively pursue the commingled construction and demolition waste stream for processing and diversion. In addition, as directed by Council, the Utility is delivering a collection and recycling service to commercial waste generators. The proposed 2012 Budget projects 190 new commercial collection accounts in this competitive sector.

In 2012 the Waste Management Utility and Buildings and Landscape Services will examine options for recycling more construction and demolition waste from City buildings projects. Buildings and Landscape Services currently require all LEED buildings and major renovation projects to recycle a minimum of 75% of all waste material. In 2012 work will begin on diverting more waste materials from City buildings projects through the Commingled Construction and Demolition Waste Facility.

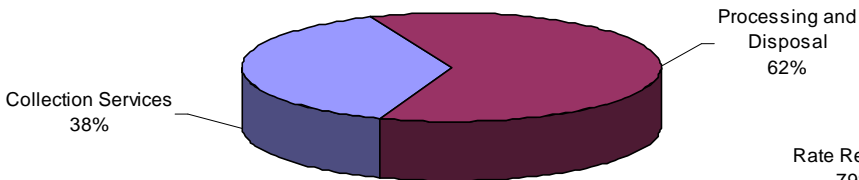
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Proposed 2012 Budget – Utility Summary (\$000)

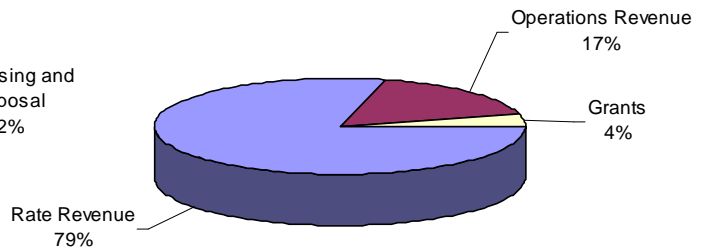
	2010 Actual	2011 Budget	\$ Change '11-'12	2012 Budget	% Change '11-'12
Revenue					
Rate Revenue	\$ 97,915	\$ 104,143	\$ 8,291	112,434	8.0
Operations Revenue	19,744	23,090	1,465	24,555	6.3
Grants	75	13,400	(7,400)	6,000	(55.2)
Transfers	8,500	3,400	(3,400)	-	(100.0)
Total Revenue	<u>126,234</u>	<u>144,033</u>	<u>(1,044)</u>	<u>142,989</u>	(0.7)
Expenditure & Transfers					
Collection Services	48,431	52,396	1,983	54,379	3.8
Processing and Disposal	<u>77,803</u>	<u>91,637</u>	<u>(3,027)</u>	<u>88,610</u>	(3.3)
Total Expenditure & Transfers	<u>126,234</u>	<u>144,033</u>	<u>(1,044)</u>	<u>142,989</u>	(0.7)
Net Income	\$ -	\$ -	\$ -	\$ -	
Full-time Equivalents	413.7	424.5	22.5	447.0	

Expenditures and Transfers include all corporate and departmental overheads, Shared Services, and financing charges.

Where the Budget will be spent



Funding by Source



Waste Management Utility

Proposed 2012 Budget – Branch Summary (\$000)

	2010 Actual	2011 Budget	\$ Change '11-'12	2012 Budget	% Change '11-'12
Revenue					
Rate Revenue	\$ 97,916	\$ 104,143	\$ 8,291	112,434	8.0
Operations Revenue	19,744	23,090	1,465	24,555	6.3
Grants	75	13,400	(7,400)	6,000	(55.2)
Transfers	8,500	3,400	(3,400)	-	(100.0)
Total Revenue	<u>126,235</u>	<u>144,033</u>	<u>(1,044)</u>	<u>142,989</u>	<u>(0.7)</u>
Expenditure & Transfers					
Personnel	27,404	30,424	1,970	32,394	6.5
Materials, Goods & Supplies	4,411	4,701	527	5,228	11.2
Contracts	51,611	51,435	581	52,016	1.1
Fleet Services	10,362	11,358	601	11,959	5.3
Shared Services	4,250	5,050	701	5,751	13.9
Intra-Municipal Services	1,470	312	531	843	170.1
Utilities	3,206	4,595	(429)	4,166	(9.3)
Other Expenses	1,120	1,097	144	1,241	13.1
Customer Billing Services	3,876	4,239	199	4,438	4.7
Financial	23,943	25,696	1,473	27,169	5.7
Biofuels Grant	-	13,400	(6,560)	6,840	(49.0)
Subtotal	<u>131,653</u>	<u>152,306</u>	<u>(261)</u>	<u>152,045</u>	<u>(0.2)</u>
Biosolid/Nutri-Gold Recoveries	(5,418)	(6,335)	(814)	(7,149)	12.8
Litter Collection	-	(1,938)	31	(1,907)	(1.6)
Intra-Municipal Recoveries	(5,418)	(8,273)	(783)	(9,056)	9.5
Total Expenditure & Transfers	<u>126,235</u>	<u>144,033</u>	<u>(1,044)</u>	<u>142,989</u>	<u>(0.7)</u>
Net Operating Requirement	\$ -	\$ -	\$ -	\$ -	-
Full-time Equivalents	413.7	424.5	22.5	447.0	

Budget Changes for 2012 (\$000)

Revenue - Changes

Rate Revenue \$8,291

The proposed increase to the monthly user fee charged on the utility bill will generate about \$6,292 in additional rate revenue, with the remaining \$1,999 coming from an increased number of customers based upon the corporate projection on population growth.

Operations Revenue \$1,465

Program Revenues are generated from tipping fees collected at the Waste Management Centre and Eco Stations for processing and disposal services, provision of waste services to non-regulated customers and extra services to regulated customers in the multi-family sector, sale of recyclables and compost and partnership and environmental offset revenue from a number of private sector businesses (e.g. Global Electronics and Electric Processors, Greys Paper, etc.). The major components of the 2012 revenue increase relate to continued improvement in the markets for recyclable material, and revenue expected from the full year operation of the Construction and Demolition Facility.

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Revenue - Changes

Grants (\$7,400)

The Waste Management Utility acts as the intermediary for the flow of grant support from the Province for the Enerkem Alberta Biofuels Facility and the Advanced Energy Research Facility. The City of Edmonton acts as a manager of the grant, distributing the funding upon Enerkem's achievement of various milestones. It is expected that all grants received for this project will have been disbursed by the end of 2012.

Transfers (\$3,400)

Over the past three years, Retained Earnings was used to reduce customer rates. This was necessary due to the fundamental change to the waste operations as a result of the closure of the Clover Bar Landfill. 2011 marks the end of using Retained Earnings to reduce customer rate requirements. The \$3.4 million addition to the customer rate requirement in 2012 translates to \$1.00 of the \$1.86 monthly rate increase.

Expenditures & Transfers - Changes

Personnel \$1,970

Movement within the salary ranges, changes in benefits and the last year of a 3-year 1% LAPP contribution increase account for \$312. To effectively manage unplanned peak requirements an increase of \$133 in Overtime is needed. New staffing requirements to manage projected customer growth and provide a full-year's operation of the Construction and Demolition Facility, increased volume of material to handle at the EWMC, and the start up of the final phase of the Integrated Processing and Transfer Facility in the fall of 2012 \$1,525 (22.5 FTE).

Material, Goods & Supplies \$527

The 2012 increase relates to costs associated with the in-service operations of the Integrated Processing and Transfer Facility.

Contracts \$581

Contract cost increases relate to increased disposal at the Ryley landfill as a result of expected unavailability of West Edmonton Landfill, tempered by increased diversion of non-residential waste stream. Other increases relate to higher revenue share payment to the MRF operator with overall anticipated higher revenues projected from commodity market price trends, the start up of the final phase of the Integrated Processing and Transfer Facility in the fall of 2012, and multi-family collection contract renewals. Contract decreases are expected in composting operations due to plant process improvements.

Fleet Services \$601

An increase in Fleet Services of \$404 is attributable to fuel cost increases. An increase of \$454 is attributed to rate increase and changes in volume due to growth in the number of customers. This is offset by a reduction of \$257 in fixed cost as the Utility is providing for its own fleet replacement through depreciation.

Shared Services \$701

The proposed 2012 rates include an addition of \$905 to reflect the phased-in process to full costing of Shared Services (2012-79.6%; 2011- 67.5%). This is offset by an overall reduction in total Shared Services cost of \$204 stemming from the Corporate re-organization.

Intra-municipal Services \$531

2012 intra-municipal services include charges from Transportation Department for bus service to the EWMC, as well as operational support (signage, gravel) at the site. It also includes on-demand building maintenance and custodial services at all Waste Management facilities, as well as a share of the Infrastructure Services administration.

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Expenditures & Transfers - Changes

Utilities (\$429)

Utilities include Power, water, wastewater, waste management, and natural gas. The reduction in 2012 is primarily the result of energy efficiencies in the organics operation stemming from the Composting Facility upgrade.

Other Expenses \$144

Included in Other Expenses are consulting and professional services, employee development and other administrative support costs. The change for 2012 is based on historical trends, and rate design study, development and public testing of options for low volume generators.

Customer Billing Services \$199

The Waste Management Utility contracts with EPCOR to provide customer billing and collection services. The existing agreement expires the end of 2011. The Proposed 2012 Budget reflects \$84 in inflationary increases, \$67 from customer growth, and \$48 in Bad Debt from a higher volume.

Financial \$1,473

The change in financial budgets reflect full year depreciation on assets projected to be put into service in 2011 and half year depreciation on 2012 in-service assets \$1,565. The change also includes the addition of a full year payment on debt taken out in 2011 and an assumed half year payment on projected 2012 debenture borrowing, offset by expected lower borrowing interest rates in 2012 (\$92).

Biofuels Grant (\$6,560)

The Waste Management Utility acts as the intermediary for the flow of grant support from the Province for the Enerkem Alberta Biofuel's Facility and the Advanced Energy Research Facility. The decrease reflects payment to be made in 2011, with the remainder of the grant expected to be paid in 2012.

Biosolid/Nutri-Gold Recoveries (\$814)

Waste Management processes and disposes of biosolids (residuals from the wastewater treatment process) for Drainage Services. The proposed 2012 budget reflects a three-year phase-in period over which the subsidy that has been provided by Waste Management will end, along with an increase in the volume of biosolids processed from 87% to 90% of the annual production.

Litter Collection \$31

The Waste Management Utility provides litter collection on behalf of the City of Edmonton in downtown, Old Strathcona, and various Business Revitalization Zones. The 2012 change reflects anticipated costs based on 2011 experience.

Full-time Equivalents - Changes

The 2012 FTE change reflects new staffing requirements to manage projected customer growth and to provide a full-year's operation of the Construction and Demolition Facility, increased volume of material to handle at the EWMC, and the start up of the final phase of the Integrated Processing and Transfer Facility in the fall of 2012. This results in a total of 22.5 permanent FTE.

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Proposed 2012-2014 Capital Budget and 2015-2021 Plan (\$000's)

Capital Projects	Proposed Capital Budget				Subtotal Including Carryforward	2015 -2021 Plan	Budget & Plan 2012-2021	Existing 2012-2014 Budget Approval	Current Budget Request
	From 2011	2012	2013	2014					
Collection Services Facilities									
NE Eco Station	-	7,668	5,500	-	13,168	-	13,168	12,000	1,168
Kennedale Facility	3,500	2,500	-	-	6,000	-	6,000	2,500	3,500
NW Eco Station					-	13,450	13,450		
	3,500	10,168	5,500	-	19,168	13,450	32,618	14,500	4,668
Processing & Disposal Facilities									
Integrated Processing & Transfer Facility	3,500	-	-	-	3,500	-	3,500	-	3,500
Collection Services and Processing & Disposal Infrastructure									
Eco Station Facilities Rehabilitation	1,800	-	500	-	2,300	2,725	5,025	-	2,300
EWMC Infrastructure Rehabilitation	-	9,494	9,511	12,328	31,333	61,436	92,769	-	31,333
	1,800	9,494	10,011	12,328	33,633	64,161	97,794	-	33,633
Vehicles and Equipment									
Waste Containers	-	1,550	1,955	2,528	6,033	15,274	21,307	-	6,033
Equipment and Vehicles	-	7,946	6,631	8,357	22,934	64,523	87,457	-	22,934
	-	9,496	8,586	10,885	28,967	79,797	108,763	-	28,967
Total	8,800	29,158	24,097	23,213	85,268	157,408	242,676	14,500	70,768

With the completion of the Processing and Disposal Facilities at the Edmonton Waste Management Centre (except for the IPTF although funding has been put in place in 2011), the level of capital investments is projected to begin returning to the pre-landfill closure level starting in 2012. The Proposed 2012 Operating Budget and Pro-Forma Statements reflect the operating impacts of capital investments of \$242.7 million over the next 10 years. The funding strategy for the Proposed 2012-2014 Capital Budget (without carry forward) is as follows:

	2012	2013	2014	3-Year Total
Long Term Debt - 10 Years	10,233	9,115	9,311	28,658
Long Term Debt - 15 Years	-	1,000	4,280	5,280
Long Term Debt - 25 Years	10,168	5,500	-	15,668
Waste Retained Earnings	8,758	8,482	9,623	26,862
Total Financing	29,158	24,097	23,213	76,468

In general, the Waste Management Utility is moving towards the principle of financing equipment and vehicles through retained earnings while matching other capital investments to be equal to their projected useful lives. Approval of this 3 - Year Capital Budget will result in improvement to the following Financial Indicators:

	<u>2011 Budget</u>	<u>2012 Forecast</u>	<u>2013 Forecast</u>	<u>2014 Forecast</u>
Debt Coverage Ratio	1.1	1.1	1.2	1.2
Debt to Net Assets Ratio	87%	86%	83%	82%

There are no new capital projects introduced in this planning period. Updates of the capital projects follow in this document.

Waste Management Utility

Capital Project Update: Northeast (Kennedale) Eco Station

This is a status update of an approved project.

Background

There are currently three Eco Stations where household hazardous waste (HHW), recyclables, and bulky waste can be dropped off. Much of the material received is reused or recycled. HHW materials that cannot be reused or recycled are sent to the Swan Hills Waste Treatment Centre for disposal and general refuse that cannot be reused or recycled is sent to landfill.

The current Eco locations are Strathcona (opened in 1995), Coronation (opened in 2000), and Ambleside (opened in 2009). In return for having these sites available to the general public regardless of their residency, the Province provided a grant towards the capital cost of these facilities and funds the ongoing disposal of HHW received. A small user fee is levied on other waste materials, intended to partially cover the cost of operations without discouraging the use of the facilities. In 2011, the Eco Station rates for waste material are \$8 for a small item, \$12 for a large item, \$25 for a partial truck load, \$35 for a truck load, and \$45 for a heaping truck load.

Reasonable and easy access to a disposal facility helps to reduce the potential for illegal dumping and helps residents manage their HHW responsibly. Alberta Environment suggests 15 kilometers or approximately 7 minutes of travel time to a facility. In the 2009-2011 Capital Budget, City Council approved the addition of a facility in northeast Edmonton to meet this general guideline.

Acquisition of a site adjacent to the City's Kennedale Integrated Yard has been identified and is expected to be purchased by the end of 2011. The projected construction completion is 2013.



Ambleside Eco Station (Template for Northeast Eco Station)

Financial Implications

The approved 2009-2011 Capital Budget provided \$3.5 million for siting and land acquisition. The 2012-2014 Capital Budget includes the additional funding of \$13.2 million for detailed design and construction. Total project capital cost is \$ 16.7 million.

The Northeast Eco Station (to be called Kennedale Eco Station on commissioning) is to be financed through self liquidating debt over a 25-year term. The projected financial and operating impacts of this facility have been reflected in the Waste Management Utility Operating Budget Model in the years required.

Waste Management Utility

Capital Project Update: Kennedale Facility Expansion

This is a status update of an approved project.

Background

Waste collection services for single family and multifamily homes directly provided by the Waste Management Utility originate at facilities at the Kennedale Integrated Yard. These facilities house staff and collection vehicles.

Growth of the City and new initiatives in recent years have necessitated increased staff and vehicles. In the 2009-2011 Capital Budget, City Council approved the provision of additional space at the Kennedale Integrated Yard for vehicle storage and staff accommodation. Current logistics with respect to movement of vehicles and staff are not safe, and costly equipment is not properly housed. The new facility comprises 3,100 square metres for vehicle storage and 1,400 square metres for staff accommodation. Construction of the facility is underway and occupancy of the facility is projected for July 2012.

Financial Implications

Council has approved funding of \$11.4 million in the 2009-2011 Capital Budget with the remainder of \$2.5 million to be approved in the 2012-2014 Capital Budget. Total project capital cost is \$13.9 million. The required annual capital expenditures are provided in the accompanying Table.

Annual Capital Expenditure

Year	Annual Expenditure
2009 (Actual)	\$ 145,000
2010 (Actual)	424,000
2011 (Forecast)	7,286,000
2012 (Forecast)	6,000,000
Total	<u>\$13,855,000</u>

Three decisions have been taken to deliver the project as budgeted. A design-build contract was determined to be the approach for delivering the project within budget. All existing buildings are retained without modification. The needed vehicle storage and office space are accommodated in one structure on an independent footprint to maximize capital investment. The projected financial and operating impacts of this facility have been reflected in the Waste Management Utility Operating Budget Model in the years required.



Kennedale Facility

Waste Management Utility

Capital Project Update: Integrated Processing & Transfer Facility

This is a status update of an approved project.

Background

The Integrated Processing and Transfer Facility (IPTF) is a key element of the Utility's response to the closure of Clover Bar Landfill and the increased focus on diversion of materials from landfill. The facility was approved by City Council in 2007, and provides three main functions:

Phase 1: Tipping and Transfer Operation - The loading of residual and non-processable waste into trailers for hauling to landfill (transfer operation). Phase 1 was completed and became operational in October 2009.

Phase 2: Pre-processing Operations - Residential and suitable commercial waste is sorted mechanically and manually into three streams: organic material that is conveyed to the Edmonton Composting Facility; metals and cardboard are recovered for recycling; and non-recyclable, high energy content waste is conveyed to an adjacent operation (Phase 3) for conversion into refuse derived fuel. Phase 2 became operational in April 2010, with capacity of up to 1,000 tonnes per day.

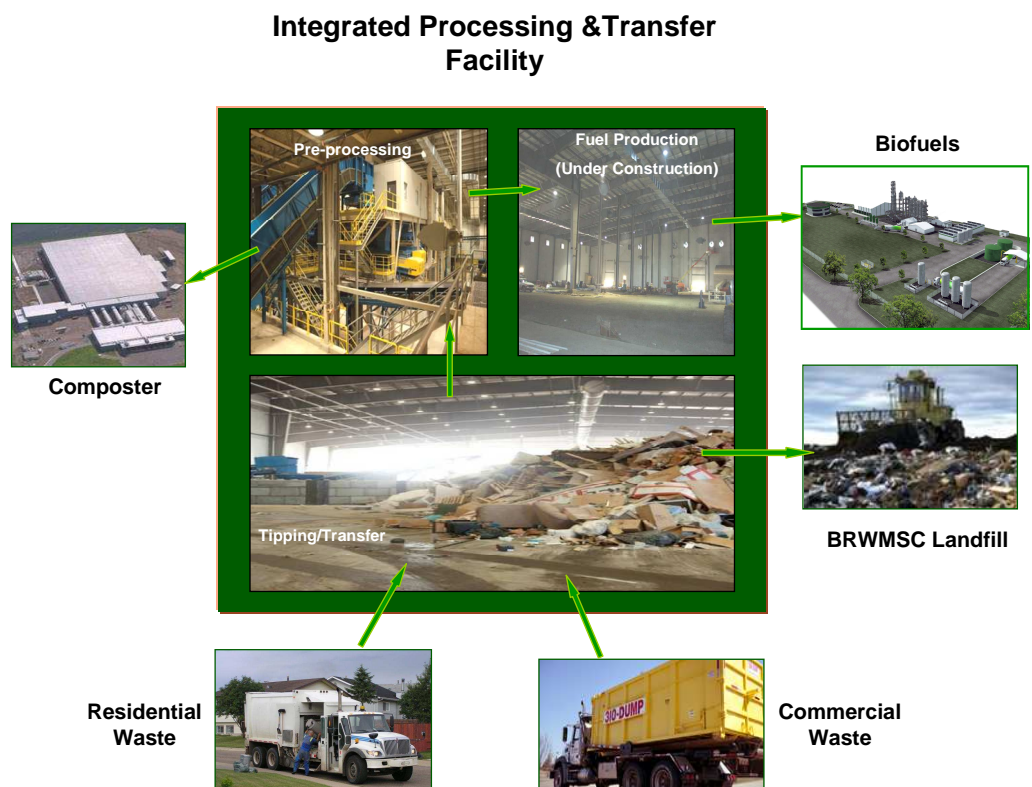
Phase 3: Refuse Derived Fuel Feedstock Production - Mechanical processing of non-recyclable, high energy content waste into feedstock and delivery to the Enerkem Alberta Biofuels Facility. When completed in 2012, this phase of the Facility will be capable of producing up to 400 tonnes of refuse derived fuel per day. Production will ramp up from late 2012 through to full production in 2014 to match the planned ramp up of the Biofuels Facility production.

Financial Implications

The Integrated Processing & Transfer Facility has an approved budget of \$88.7 million; of which \$27.7 million is financed through a 10-year debenture and the balance through a 25-year debenture.

The 2012 Proposed Budget reflects principal and interest payments on \$85 million of debenture (\$70 million of which has been issued to June 2011), depreciation expense on \$37.5 million of the assets that have been put into service, and full annual operating costs of Phase 1 and 2 of the facility. Operational costs relating to Phase 3 will ramp up from 2012 through 2014 as the Biofuels Facility demand for feedstock climbs.

The projected financial and operating impacts of this facility have been reflected in the Waste Management Utility Operating Budget Model in the years required.



Waste Management Utility

Capital Project Update: Infrastructure Rehabilitation

This is a status update of an approved project.

Background

To deliver waste collection, processing and disposal services to customers, the Waste Management Utility uses a variety of capital assets. With the exception of a portion of the Advanced Energy Research Facility, paid by a grant, capital investments are made by the Utility through customer rates and/or retained earnings. Expenses related to the rehabilitation of Clover Bar Landfill and the systems that are required for post closure care of the landfill, such as the Leachate Treat Plant, are financed from an established Post Closure Reserve. At December 31, 2010 the gross book value of all capital assets is \$325 million, with \$110 million depreciated. While regular maintenance takes place as part of the ongoing operating budgets, more significant rehabilitation, upgrades, renovation, and/or replacement of processing equipment are needed. This work is categorized under two categories as follows

Collection Services Infrastructure - includes work related to Collection Services facilities at Kennedale, at Eco Stations and at Recycle Depots.

Processing and Disposal Infrastructure - Includes work related to the Edmonton Waste Management Centre (EWMC) site such as Clover Bar Landfill rehabilitation, site roadway improvements, the overall site drainage system improvements and utility services network expansion/ improvement. It also includes work related to established facilities and systems at the EWMC such as the Integrated Processing & Transfer Facility, Composting Facility, Materials Recovery Facility, Construction & Demolition Facility, Biofuels Research Facility and smaller facilities on site.

Financial Implications

Two projects drive the need for funding in the 2012-2014 Capital Budget:

1. Eco Station Facilities Rehabilitation (Proposed 2012-14 capital need - \$2.30 million)

Funding is needed to upgrade the Coronation Eco Station to address traffic congestion, reduce impact on adjacent businesses, increase customer convenience and allow for large item reuse activities. Pavement replacement is also needed at the Strathcona Eco Station.

2. EWMC Infrastructure Rehabilitation (Proposed 2012-14 capital need - \$28.73 million)

The EWMC is a 233 hectare site that includes infrastructure elements as outlined above. Approximately \$9.5 million is required annually to expand, rehabilitate, and replace systems as they reach the end of their useful lives or are replaced by improved systems for greater operational efficiency. While the exact areas of focus vary from year to year, annual investments typically include the rehabilitation (soil capping and revegetation) of the landfill, upgrades to the aging landfill groundwater diversion system, expansion of the groundwater monitoring system, and upgrades to the leachate collection and treatment systems to manage continuing leachate production at the landfill. Investment in this work is necessary to meet the requirements of regulatory approvals and operational needs. Investments are also made in rehabilitation of roadways and expansion of utilities as needed. From 2012 to 2014 there will also be ongoing investment in upgrading of components of the Composting Facility and the Materials Recovery Facility to keep up with growing volumes for processing.



Edmonton Waste Management Centre

The projected financial and operating impacts of these projects have been reflected in the Waste Management Utility Operating Budget Model in the years required.

Waste Management Utility

Capital Project Update: Vehicles and Equipment Acquisition

This is a status update of an approved ongoing project.

Background/Status Update

Currently, the Waste Management Utility uses 102 collection vehicles - 80 for single family, 15 for multi-family, 4 for Recycling Depots and 3 for Eco Stations. The Utility also uses 14 highway tractors and 44 long haul trailers to transport non-recyclable and non-compostable waste to landfills. The service lives of these vehicles are typically 200,000 km for waste collection vehicles, 8 years for highway tractors and 10 years for long haul trailers.

The Utility requires front-load bins (8100 units), side-load bins (600 units) and roll-off bins (33 units) in providing services to its customers and for internal movement of materials at the Edmonton Waste Management Centre. Front-load bins are used for servicing the multi-family sector, automated side load bins for servicing Recycle Depots, and roll-off bins for the Big Bin Program and Edmonton Waste Management Centre operations. These receptacles vary in age and state of repair. The containers can have average useful lives of 15 years. In addition to vehicles and waste containers, the Utility relies on numerous pieces of specialty portable equipment in its operations. These include screens, conveyors, compost turning machines, wood grinding units, and other specialized equipment.



Financial Implications

Two projects drive the need for funding in the 2012-2014 Capital Budget:

1. Vehicles and Equipment (Proposed 2012-14 capital need - \$22.93 million)

Funding is needed for acquisitions of vehicles (replacement and growth) and for specialty portable equipment.

2. Waste Containers (Proposed 2012-14 capital need - \$6.03 million)

Funding is needed for containers described above. Efforts are made to spread the replacement of containers evenly over the long term, with an average replacement requirement of \$2 million annually.

The total proposed 2012-2014 Capital Budget for Vehicle and Equipment Acquisition totals approximately \$29 million. The useful lives of these capital assets vary between 5 and 15 years. Given that the Utility strives to level out the annual capital requirement for vehicles and equipment, and that such assets are continually being replaced as they reach the end of their useful lives, \$27 million of the \$29 million required is being funded through retained earnings. In the long term, the intention is to fully fund these types of capital expenditures through retained earnings and not through borrowing.



The projected financial and operating impacts of these projects have been reflected in the Waste Management Utility Operating Budget Model in the years required.

Branch — Waste Management Services

Proposed 2012 Budget—User Fee Information

Facility User Fees (Non-regulated Rates)

Fee Description	Proposed Change (2011 to 2012)	Explanation
Fees charged for waste disposal at the Edmonton Waste Management Centre	<ul style="list-style-type: none"> Commercial waste fee increase from \$68.00 to \$75.00 per tonne Commingled construction and demolition waste increase from \$55.00 to \$60.00 per tonne Source Separated construction and demolition waste increase from \$35.00 to \$40.00 per tonne 	Increase in facility user fees for the Edmonton Waste Management Centre reflects the transition to higher cost processing systems to replace landfill capacity in Edmonton.

Utility Fees (Regulated Rates)

Driver for Change in Regulated Rate	Proposed Change (2011 to 2012)	Proposed Percentage Change (2011 to 2012)										
<p align="center">Change in Single Family Monthly Utility Fees</p> <table border="1"> <tr> <td>End use of Retained Earnings to reduce fee increases.</td> <td align="right">\$1.00</td> </tr> <tr> <td>Depreciation and debt repayment expenses</td> <td align="right">\$0.27</td> </tr> <tr> <td>Collection, processing and disposal operations.</td> <td align="right">\$0.38</td> </tr> <tr> <td>Continued phase in of full allocation of Shared Services costs.</td> <td align="right">\$0.21</td> </tr> <tr> <td>Total Change</td> <td align="right">\$1.86</td> </tr> </table>	End use of Retained Earnings to reduce fee increases.	\$1.00	Depreciation and debt repayment expenses	\$0.27	Collection, processing and disposal operations.	\$0.38	Continued phase in of full allocation of Shared Services costs.	\$0.21	Total Change	\$1.86	<p>Increase in single family monthly utility fee \$1.86 (from \$31.34 in 2011 to \$33.20 in 2012)</p> <p>Increase in multi-family monthly utility fee \$1.21 (from \$20.37 in 2011 to \$21.58 in 2012)</p>	<p>Change in the monthly utility fee 5.9%</p>
End use of Retained Earnings to reduce fee increases.	\$1.00											
Depreciation and debt repayment expenses	\$0.27											
Collection, processing and disposal operations.	\$0.38											
Continued phase in of full allocation of Shared Services costs.	\$0.21											
Total Change	\$1.86											

Bylaw Requiring Approval

Bylaw Number	Description
Waste Management Bylaw #15931	To amend current Bylaw #13777 for facility fees and monthly utility rate.

Waste Management Utility

Pro-Forma Statements

Pro-forma Income Statement

	2012	2013	2014	2015	2016
Revenues					
Rate Revenue	112,434	121,627	131,088	141,288	149,445
Program Revenue	24,555	27,504	29,519	30,525	31,560
Grant Revenue	6,000	-	-	-	-
Total Revenues	142,989	149,131	160,608	171,813	181,005
Expenses					
Operating & Maintenance	114,184	116,199	123,420	127,831	134,608
Shared Services	5,751	6,672	7,618	7,823	8,034
Customer Billing Service	4,431	4,670	4,916	5,173	5,461
Depreciation	16,805	18,086	19,123	19,786	21,603
Interest	10,874	11,124	11,056	11,092	11,213
Subtotal	152,046	156,751	166,133	171,705	180,920
Biosolids Revenue	(7,149)	(7,465)	(7,606)	(7,811)	(8,021)
Recovery for City Litter Collection	(1,908)	(1,955)	(2,294)	(2,356)	(2,419)
Net Expenses	142,989	147,331	156,233	161,539	170,479
Net Income	-	1,801	4,375	10,273	10,526
Opening Retained Earnings	40,556	45,945	51,963	61,328	74,103
Net income (loss)	0	1,801	4,375	10,273	10,526
Post closure liability draw for capital	750	875	511	-	-
Amortization of contributed capital	(330)	(330)	(330)	(330)	(330)
Vehicle equity transfer	4,969	3,673	4,810	2,832	2,616
Ending Retained Earnings	45,945	51,963	61,328	74,103	86,915
<i>Single Family Monthly Unit Rate</i>	\$33.20	\$35.32	\$37.44	\$39.69	\$41.29
<i>\$ Increase over previous year</i>	\$1.86	\$2.12	\$2.12	\$2.25	\$1.60
<i>Rate Increase</i>	5.9%	6.4%	6.0%	6.0%	4.0%

Waste Management Utility

Pro-Forma Statements

Pro-Forma Balance Sheet

	2012	2013	2014	2015	2016
Assets					
Cash	16,665	13,249	17,259	23,903	30,688
Other Current Assets	13,188	13,188	13,188	13,188	13,188
Total Assets	29,853	26,437	30,447	37,091	43,876
Liabilities					
Liabilities	15,753	15,753	15,839	15,839	15,839
Landfill closure and post-closure	17,163	15,761	14,708	14,166	13,610
Long-term Debt	230,471	230,709	227,400	227,997	225,583
Total liabilities	263,386	262,223	257,947	258,003	255,033
Net Financial Assets (Net Debt)	(233,533)	(235,786)	(227,500)	(220,912)	(211,156)
Non-Financial Assets					
Contributed Tangible Capital Assets	10,957	10,627	10,296	9,966	9,636
Non-Contributed Tangible Capital Assets	268,509	277,111	278,520	285,037	288,424
Other Assets	11	11	11	11	11
Total Non-Financial Assets	279,477	287,748	288,828	295,015	298,071
Retained Earnings	45,945	51,963	61,328	74,103	86,915

Waste Management Utility

Financial Indicators

	2012 Forecast	2013 Forecast	2014 Forecast	2015 Forecast	2016 Forecast
1 Rates Sufficient to Meet Expenses Implementation Plan - Retained Earnings Net Income (loss)	\$ 0	\$ 1,801	\$ 4,375	\$ 10,273	\$ 10,526
<i>Target</i>	<i>Positive Net Income</i>				
2 Fair and Reasonable Return Return on Rate Base	0.0%	0.6%	1.5%	3.4%	3.4%
<i>Target</i>	<i>Return to be between 4% and 10%</i>				
<i>Monthly Billing Increase</i>	\$ 1.86	\$ 2.12	\$ 2.12	\$ 2.25	\$ 1.60
<i>Impact of Customer Rate</i>	5.9%	6.4%	6.0%	6.0%	4.0%
3 Financing of Capital Investments Debt Coverage Ratio Debt to Net Assets Ratio	1.1 86%	1.2 83%	1.2 82%	1.4 80%	1.4 78%
<i>Target</i>	<i>Debt Coverage Ratio Not Less than 1.3 Debt to Net asset ratio at 60%</i>				
4 Cash Balance Uncommitted Cash Balance Next Year's Capital Financed by RE	\$ 16,665 \$ 8,008	\$ 13,249 \$ 7,607	\$ 17,259 \$ 9,112	\$ 23,903 \$ 7,195	\$ 30,688 \$ 7,184
<i>Target</i>	<i>Sufficient cash for planned capital investment to be financed by Retained Earnings</i>				
5 Long Range Plans Pro-forma Information	10 Years	10 Years	10 Years	10 Years	10 Years
<i>Target</i>	<i>10 year financial planning horizon</i>				