



# INFORMATION REPORT

<b>TO:</b>	Chair and Members Audit, Finance and Administration Committee
<b>COMMITTEE DATE:</b>	June 12, 2017
<b>SUBJECT/REPORT NO:</b>	2016 Annual Report on Commodity Price Hedging (FCS17052) (PW17043) (City Wide)
<b>WARD(S) AFFECTED:</b>	City Wide
<b>PREPARED BY:</b>	John Savoia, Senior Policy Advisor Corporate Services Department (905) 546-2424 Ext. 7298  Tom Chessman, Manager, Office of Energy Initiatives Public Works Department (905) 546-2424 Ext. 2494  Linda Campbell, Superintendent, Utilities Public Works Department (905) 546-2424 Ext. 2810
<b>SUBMITTED BY:</b>	Brian McMullen Director, Financial Planning, Administration and Policy Corporate Services Department (905) 546-2424 Ext. 4549  Rom D'Angelo, C.E.T.; CFM Director, Energy, Fleet and Facilities Management Public Works Department (905) 546-2424 Ext. 4617
<b>SIGNATURE:</b>	

## Council Direction:

The City's Corporate Energy Policy stipulates the General Manager of Finance and Corporate Services, reports to Council at least once each fiscal year with respect to any Energy Commodity agreements. In May 2014, Council approved a revision to the City's Corporate Energy Policy (PW14050) which now incorporates the City's previously separate Energy Commodity Policy into one comprehensive policy.

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*OUR Mission: To provide high quality cost conscious public services that contribute to a healthy, safe and prosperous community, in a sustainable manner.*

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**Information:**

The City of Hamilton's 2016 Annual Report on Commodity Price Hedging deals exclusively with the City's energy commodity price hedging agreements and utility rate transactions for natural gas, electricity and fuel.

As defined in the Corporate Energy Policy, "Energy Commodities" means electricity, green power, natural gas, methane and all other petroleum based fuel products such as: diesel, bio-diesel, gasoline, fuel oil, propane and any other bulk commodity primarily used by the City for the purpose of heating and cooling of buildings and other structures, electricity generation, cogeneration demand response programs, smart grid programs and the fuelling of City fleets, as determined by the Manager of Energy Initiatives.

**Policy Statement**

The City will procure the necessary quality and quantity of Energy Commodities in an efficient, timely and cost-effective manner, while maintaining the controls necessary for a public institution in accordance with this Corporate Energy Policy. The City will encourage the negotiation of fair Master Agreements and agreements with Contract Agents, with respect to the purchase, sale, delivery and storage of Energy Commodities. The City will strive to ensure that the best value is obtained and that the financial stability of Energy Commodity suppliers meets high thresholds to ensure sustainability and reliability of supply.

The City will consider commodity price hedging agreements as a means of fixing, directly or indirectly or enabling the City to fix the price or range of prices to be paid by the City for the future delivery of some or all of a specific Energy Commodity or the future cost to the municipality of an equivalent quantity of the Energy Commodity, where it is advantageous for the City to do so.

The City will also consider opportunities for entering into agreements with utilities and other transportation and delivery supplier contracts (e.g. pipeline supply) to secure commodity supply and utility rates of specific Energy Commodities.

**Energy Commodity and Avoided Costs**

The energy commodity avoided costs include Global Adjustment (GA) rate changes and natural gas hedging programs. For the 2016 calendar year, there was \$5.11 M in avoided costs and is outlined in the Figure 1 below.

Figure 1: 2016 Energy Commodity and Avoided Costs

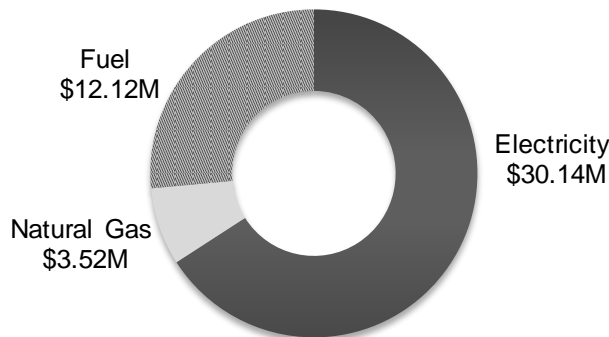
2016	Avoided Costs (M)	2016 % Levy	2016 % Rate
Electricity (Global Adjustment)	\$4.68	27%	73%
Natural Gas (Hedging)	\$0.43	85%	15%
Fuel	\$0.00	0	0
Total	\$5.11	32%	68%

The cumulative avoided costs for energy commodity programs from 2006 to 2016 are \$28.8 M.

**Overall Costs**

In the City’s, 2016 Annual Energy Report (PW17037) the total actual energy costs for electricity, natural gas and fuels were reported at \$45.8 M. This is a 2% increase over 2015 energy costs. The breakdown is shown in Figure 2:

Figure 2: 2016 Total Energy Costs (Electricity, Natural Gas and Fuel) in Millions (M)



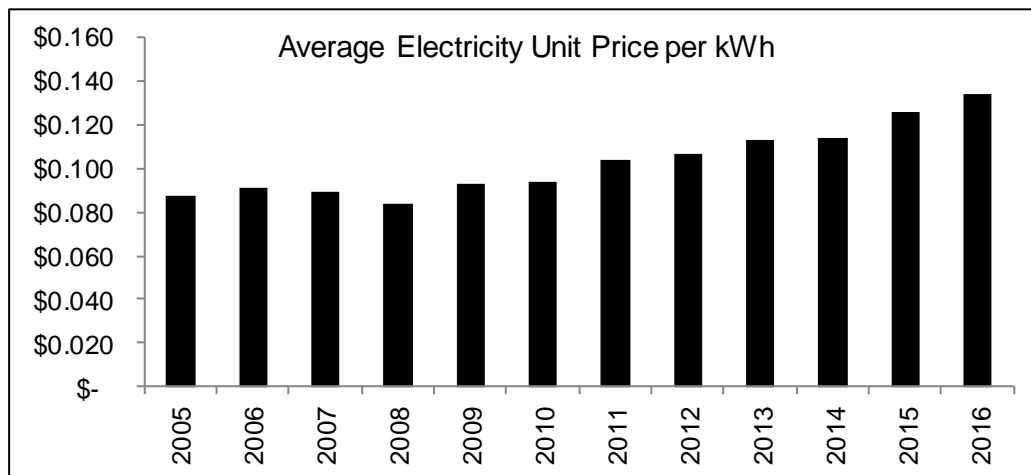
The electricity and natural gas costs (including those from district heating and cooling) include all City-owned facilities, Hamilton Water, Public Works Operations and Street and Traffic Lighting. It excludes CityHousing Hamilton. The fuel information reported includes all Fleet, Operations and Transit vehicles but does not include Hamilton Police Services, Metrolinx/GO Transit or DARTS. Fuel costs include: diesel, unleaded gasoline and compressed natural gas (CNG).

## Electricity

Electricity is comprised of commodity as well as costs associated with distribution, transmission, regulatory and delivery. The City is serviced by two local distribution companies: Alectra Utilities (formally Horizon Utilities) and Hydro One. The City's cost and consumption are approximately 85% from Horizon Utilities and 15% from Hydro One. While the utility rates may vary between the utilities, both are regulated by the Ontario Energy Board (OEB) and must seek approvals for any rate or cost of service adjustments.

In 2016, the City's overall expenditure for electricity was \$30.14 M. Overall, electricity costs in 2016 increased by approximately \$2 M versus 2015. This represents a year over year increase of 7% over 2015 electricity costs. There was an increase of less than 1% in overall electrical consumption in 2016 compared to 2015. The City's overall average price of electricity per kilowatt-hour (kWh) increased from 12.6 cents/kWh in 2015 to 13.4 cents/kWh in 2016. The average price (cents/kWh) for electricity, year over year, from 2005 to 2016 is outlined in Figure 3 below.

Figure 3: City of Hamilton Average Electricity Cost

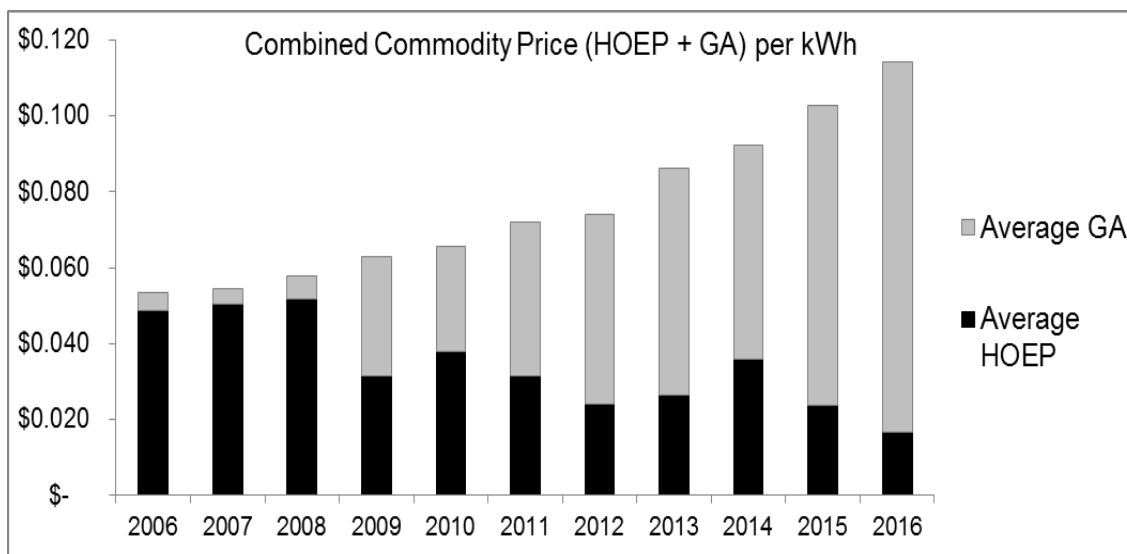


There are a variety of factors that can impact electricity cost some of which are consumption and process changes, regulatory changes, market activity and weather. Of note in 2016, there was also the addition of Tim Horton's Field to the reporting as 2016 was the first full year of operations at that site.

The electricity market in Ontario is complex, volatile and only partially de-regulated. Market conditions play a role in monthly rate setting for the cost of electricity (commodity), but the rates are heavily influenced by long-term generation contracts. Ontario's electricity commodity is comprised of the Hourly Ontario Electricity Price (HOEP) and the Global Adjustment (GA). When the HOEP is low, the GA increases in order to cover the costs of generation in the Province. The monthly costs vary depending on consumer demand, the generation mix, how often each type of generation is offered into the market and weather.

Although it is possible, fixing for forward terms on the price of electricity (HOEP) is of lesser benefit. Fixing the HOEP does little to protect against the greater fluctuations of the GA, which now makes up the larger portion of commodity costs. Staff recommendations have been to not hedge against the HOEP due to unfavourable market conditions. While the HOEP has declined over recent years, this has been offset by significant increases to the price of the Global Adjustment, as illustrated in Figure 4 below.

Figure 4: Electricity - Annual Average Price of HOEP and Global Adjustment



The annual average HOEP was 1.7 cents/kWh in 2016, which was a 30% decrease versus 2015. The HOEP decrease in 2016 was offset by significant increases in the GA. The average GA price in 2016 was 9.8 cents/kWh. This represents a 23% increase versus 2015. The overall combined commodity price for electricity (11.4 cents/kWh) amounted to an 11% increase in 2016 when compared to 2015.

**Global Adjustment**

The Global Adjustment (GA) is a market mechanism to account for differences between the market price and the rates paid to regulated and contracted generators and for conservation and demand management programs. Some of the GA costs arise from contracts that the Independent Electricity System Operator (IESO) has with generators, many of which are fixed price or guaranteed revenue agreements. There is no market mechanism to hedge against the GA rate.

When spot prices (HOEP) are lower, the generator does not earn enough revenue from power sales to meet its revenue guarantees. In that case, the IESO pays the generator to make up this difference and the costs are recovered from consumers through the GA. Therefore, in a month when the market price of electricity is low, the GA will be higher and conversely when market prices are high, the GA will be lower.

The majority of City accounts are billed the GA rate as Class B. The City was able to move some large accounts to Class A, which uses a different GA billing methodology. Class A sites have the ability to impact their costs by reducing consumption during hours of provincial peak demand. The sites at 900 Woodward Avenue (Hamilton Water), the Municipal Recycling Facility, FirstOntario Centre, Central Utilities Plant (CUP) and the Hamilton Water pump station at Greenhill Avenue were converted to Class A. The change has resulted in an avoided cost of nearly \$4.7 M in 2016 in GA charges, and a cumulative avoided cost of \$16.1 M since 2011.

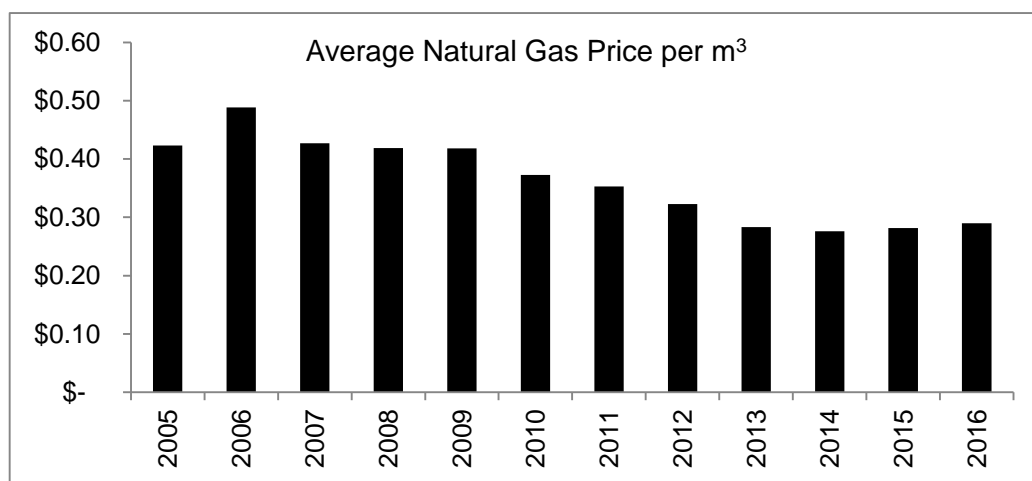
Figure 5: Global Adjustment Avoided Costs 2011-2016

<b>Year</b>	<b>Standard Global Adjustment Charge</b>	<b>Actual Global Adjustment Charge</b>	<b>Avoided Cost (Savings)</b>
2011	\$2,703,065	\$1,640,102	\$1,062,963
2012	\$3,852,903	\$2,354,335	\$1,498,568
2013	\$5,720,669	\$3,220,565	\$2,500,104
2014	\$5,574,562	\$3,127,867	\$2,446,695
2015	\$7,931,504	\$4,020,207	\$3,911,297
2016	\$9,132,962	\$4,450,757	\$4,682,206
<b>Grand Total</b>	<b>\$34,915,666</b>	<b>\$18,813,832</b>	<b>\$16,101,833</b>

## Natural Gas

The City's overall expenditure for 2016 natural gas including the commodity costs and utility charges for delivery, transportation and storage was \$3.5 M. This is a decrease of 3% from 2015 costs as reported in the 2016 Annual Energy Report (PW17037). There was a decrease of 6% in overall natural gas consumption compared to 2015 numbers. The overall average unit price was \$0.29 per cubic metre (m<sup>3</sup>), which was a 3% increase over 2015. The average price for natural gas, year over year, from 2005 to 2016 is outlined in Figure 6.

Figure 6: City of Hamilton Average Natural Gas Cost



## Natural Gas Risk Management

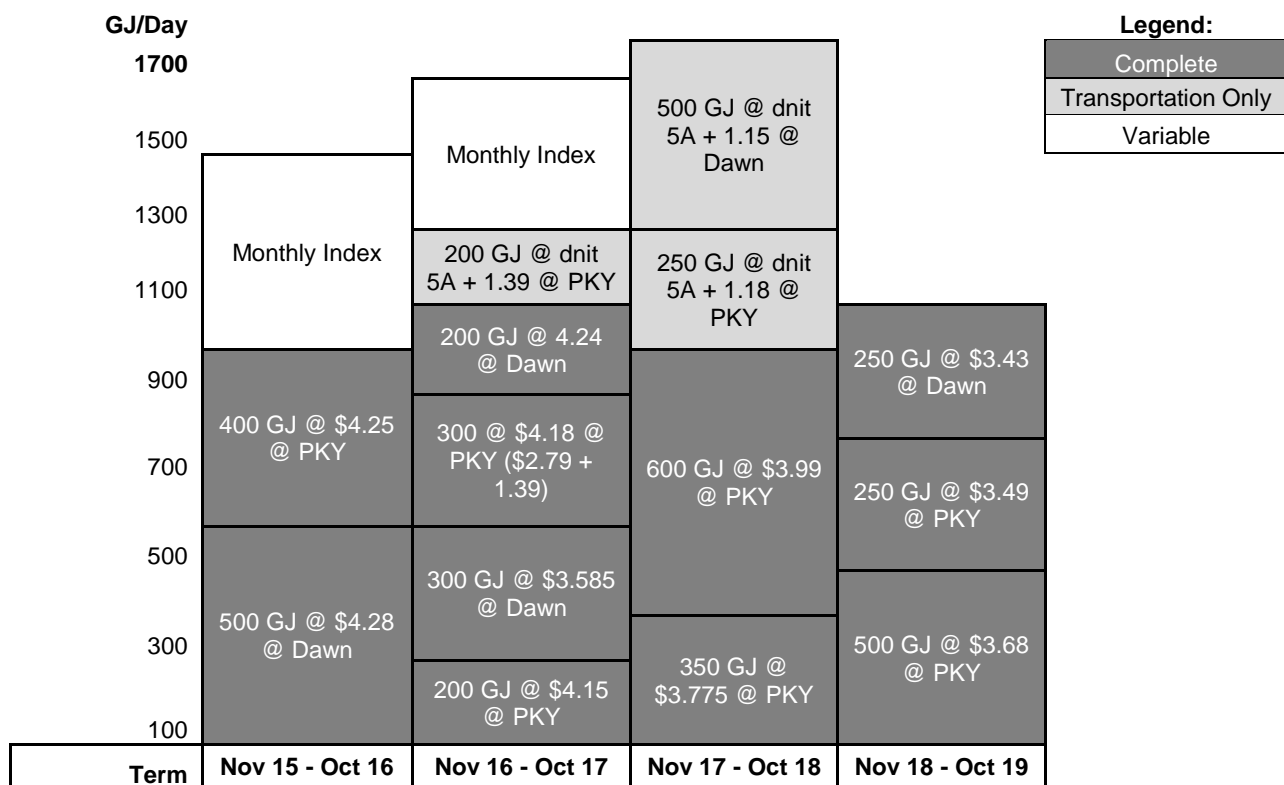
In an effort to maintain control of costs and minimize the degree of price volatility, the City has purchased its natural gas directly from the wholesale market (since June 2006). The City has supply agreements with multiple parties to allow for the City to purchase commodities at competitive wholesale market prices and hedge for forward terms. A portion of natural gas supply is purchased as much as two years in advance to protect against market volatility while other portions are purchased just a month or two in advance. Fixing the price on a portion of the City's natural gas volumes has allowed for better budget predictability and protection against spot market fluctuations which is particularly important during periods of tight supply, such as extremely cold winter weather or unpredictable market events. Overall, the procurement strategy is dynamic, as staff, in conjunction with industry experts and the retained consulting firm; make purchasing decisions based on market conditions.

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Natural gas is purchased for the City's facilities and for compressed natural gas (CNG) used to fuel transit vehicles. The average 2016 price for natural gas commodity was \$4.05 per gigajoule (GJ) (\$0.154/m<sup>3</sup>) including both hedged and unhedged volumes. This does not include any Union Gas charges such as delivery or storage. In 2017, the Cap and Trade charge is included in the Union Gas delivery charge.

Based on the City's current delivery requirements, approximately 63% of its natural gas supply is fully hedged, with a further 13% transportation only hedged up until the end of October 2017. Further volume is hedged for the periods starting November 1, 2017 and November 1, 2018. Figure 7 provides a profile of the completed hedges. Staff monitors the market and continues to develop strategies for purchasing into the forward terms to further capture agreeable market opportunities.

Figure 7: Natural Gas Hedge Breakdown



- GJ/Day = Gigajoule per day
- PKY = Parkway Ontario delivery point
- Dawn = Union Dawn Ontario delivery point
- Transportation Only = volume only fixed for transport of gas from Aeco to Ontario delivery point
- Aeco (dnit 5A) = Alberta index delivery point



The City benchmarks the performance of its natural gas hedging activities against the procurement program offered by the Association of Municipalities of Ontario/Local Authority Services (AMO/LAS). The City has enough volume to allow for direct purchases of natural gas with wholesale suppliers. However, smaller municipalities may not have the volume or expertise to manage their own programs. Therefore, they benefit from and highly value the AMO/LAS program and its consolidated volumes and centralized purchasing programs. The City and AMO/LAS program comparison is shown in Figure 8 with overall results shown in Figure 9.

Figure 8: Average Price Comparison City to AMO/LAS Natural Gas Program

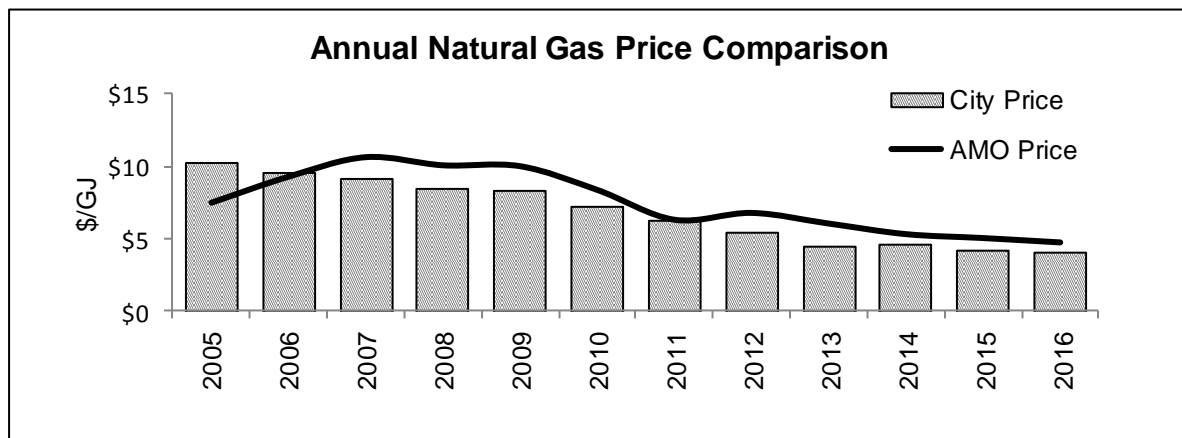


Figure 9: Performance of Natural Gas Hedge Activity compared to AMO/LAS

Natural Gas	2016*	Accumulated Avoided Costs*
Levy (Tax) Supported Budget	\$ 365,430	\$ 5,613,383
Rate Supported Budget	\$ 63,111	\$ 1,005,661
<b>Total Avoided Costs:</b>	<b>\$ 428,540</b>	<b>\$ 6,619,044</b>

\*Performance relative to AMO/LAS natural gas hedging program

### Natural Gas Agreements for Supply, Transportation, Storage and Delivery

In 2016, the City had master agreements for natural gas supply in place with Shell Energy North America (Canada) Inc., EDF Trading North America, LLC and Royal Bank of Canada. All current supply counterparties have credit ratings of a level or above that is compliant with the Corporate Energy Policy.

The City has several contracts in place that are required to facilitate the transportation, delivery and storage of the City's natural gas supply. For 2016, those agreements included:

- EDF Trading North America, LLC;
- Shell Energy North America (Canada) Inc. – natural gas;
- Royal Bank of Canada (RBC);
- TransCanada Pipe Line;
- Union Gas (including a M13 rate for Biogas).

### **Direct Purchase Agreements (DPA) with Union Gas**

The City has DPA's in place with Union Gas Limited. These agreements outline the terms of delivery of natural gas, contract volumes and storage within the Union Gas franchise area. The parameters are shown below in gigajoules (GJ) which is the unit in which gas is purchased to meet the requirements. Prices and consumption data on Union Gas bills are reported in cubic metres (1 GJ = ~26.4 cubic metres). In 2016, the agreements and parameters were:

- SA9369 for 159 GJ/day – 29 miscellaneous City natural gas accounts which run from February 1 to January 31 each year;
- SA7020 for 1,150 GJ/day – 200 miscellaneous City natural gas accounts which runs from November 1 to October 31 each year.
- T1 for 320 GJ/day (increased from 220 GJ/day as of September 2016) - For Transit's CNG bus fleet and transit site. The contract runs September 1 to August 31 each year.

Each DPA has specific delivery requirements at different points along the variety of pipelines within North America and are reviewed and renewed annually. DPAs may also be amended throughout the year.

### **Natural Gas Market**

Natural gas prices spent the first half of of 2016 on a flat to downward trend as compared to 2015. There was an uptick in the last quarter, particularly in transportation prices to Dawn and Parkway hubs. There was little extreme weather in early 2016 and a mild spring which, coupled with strong production, allowed for re-build of North American storage volumes and kept downward pressure on prices. The hot summer weather experienced in 2016 increased demand for natural gas-fired electrical generation and slowed injections into storage for a time. Despite this, at the start of the heating season, the storage position was at an all-time high.

Early withdrawals from storage due to colder weather and a slowdown in production in late 2016, did impact prices which have carried into 2017 where forward terms are now offered at slightly lower prices than rest of the current year. Production is expected to recover and steadily refill which should put downward pressure on prices. However, unexpected weather events or another hot summer, changes to production, pipeline capacity pressures and / or a decrease to the value of the Canadian dollar could cause prices to rise in the short and long terms.

While steps can be taken to manage natural gas prices through hedging activity, controlling consumption plays a large role in managing the overall costs. Consumption reduction helps to mitigate the potential for increased costs of natural gas on the utility rate side (i.e. Delivery), while further reducing the footprint of the City's facilities by reducing carbon emissions.

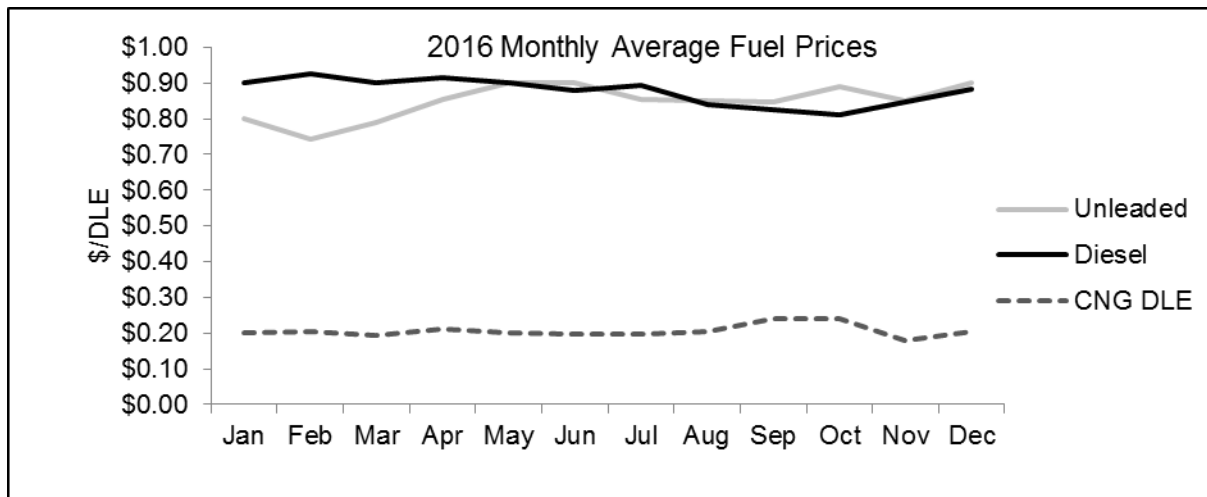
### **Compressed Natural Gas (CNG)**

Natural Gas is purchased for the City's facilities, but also for the growing Transit fleet of natural gas-fuelled buses. In partnership with Union Gas, the City completed a new CNG station at the Mountain Transit Centre in 2015 to service the fleet of existing and new natural gas buses. In 2016, the total cost of natural gas for the buses was approximately \$570,300.

The CNG station operates under a natural gas storage contract (T1). The T1 contract is a daily-balanced contract with storage availability. The amount of storage volume is contracted annually and for the 2016 contract term (September 2016 to August 2017); the T1 was allotted 9544 GJs of storage. The difference between the daily volumes purchased and consumed are injected or withdrawn from the storage account. The contract allows for greater flexibility in managing the supply, but must be reviewed daily to adhere to specific storage parameters.

The Transit fleet totalled 75 natural gas buses by the end of 2016 and is expected to increase in 2017 and 2018. Natural Gas has a lower cost compared to Diesel. Figure 10 below shows the City's monthly fuel prices including the CNG price (converted to diesel equivalent (DLE)).

Figure 10: 2016 Monthly Fuel Prices for Diesel, Unleaded Gasoline and CNG



In 2016, CNG buses travelled over 3.5 M kilometres and used 2,616,192 equivalent litres of diesel (DLE). Natural gas costs to fuel the CNG buses were \$570,309. When converted into diesel equivalent dollars and adjusting for efficiency, the resulting avoided cost, shown in Figure 11 below, of using CNG buses instead of diesel buses is over \$1 M.

Figure 11: Avoided Costs of CNG buses

CNG km Traveled (km)	\$3,252,905
Diesel Litre Equivalent (DLE)	\$2,616,192
Number of DLE Litres of Diesel*	\$1,935,982
Average Diesel Cost at \$.88/L	\$1,703,664
2016 CNG Actual Cost	\$570,309
<b>Avoided cost by using CNG</b>	<b>\$1,133,355</b>

\*Average CNG bus operates at 74% efficiency per DLE compared to Diesel buses

### Traditional Fuel Supply

The City of Hamilton purchases diesel and gasoline fuel for its fleet of vehicles such as buses, waste collection, snow removal trucks, street sweepers, forestry and parks vehicles, as well as Fire and Hamilton Paramedic Services vehicles. In addition, the City purchases fuel for some external groups including Horizon Utilities, DARTS and Hamilton Police Services.

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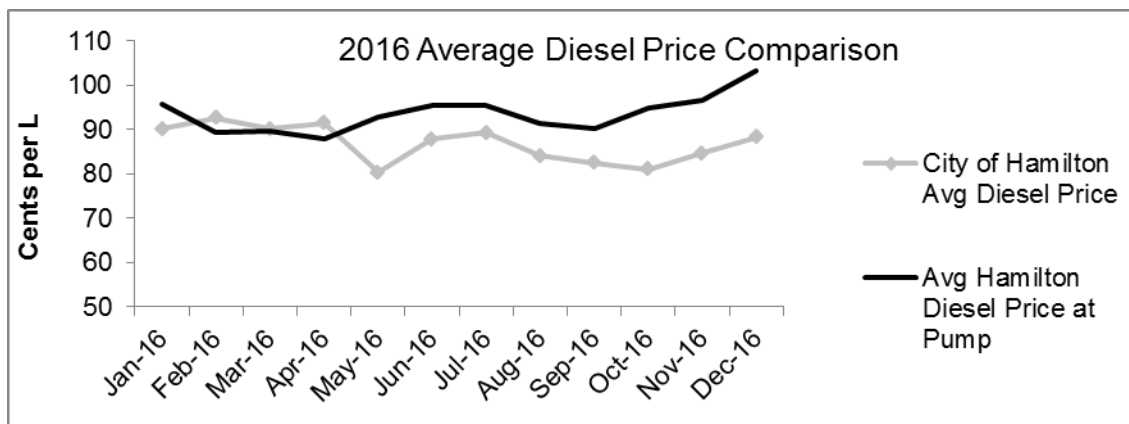
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In 2016, the City's fuel procurement strategy involved contractual bulk supply agreements with two suppliers: Suncor Energy Products Partnership and Shell Canada Products, with the total volumes and dollars for 2016 split approximately 60% to 40%, respectively. The fuel contracts are reviewed annually and based on pricing, deliverability and fuel types, the strategy can be adjusted accordingly. In 2017, there is one supplier for the supply of diesel and gasoline, Suncor Energy Products Partnership. The pricing arrangement with both suppliers for 2016 was based on the daily "Rack" price of each required fuel type (diesel and gasoline) from a designated source terminal, with negotiated discounts, delivery charges and taxes. Paying daily rack pricing for fuel assures customers are getting the lowest available price on the market for that day. All current supply counterparties have credit ratings that are compliant with the Corporate Energy Policy.

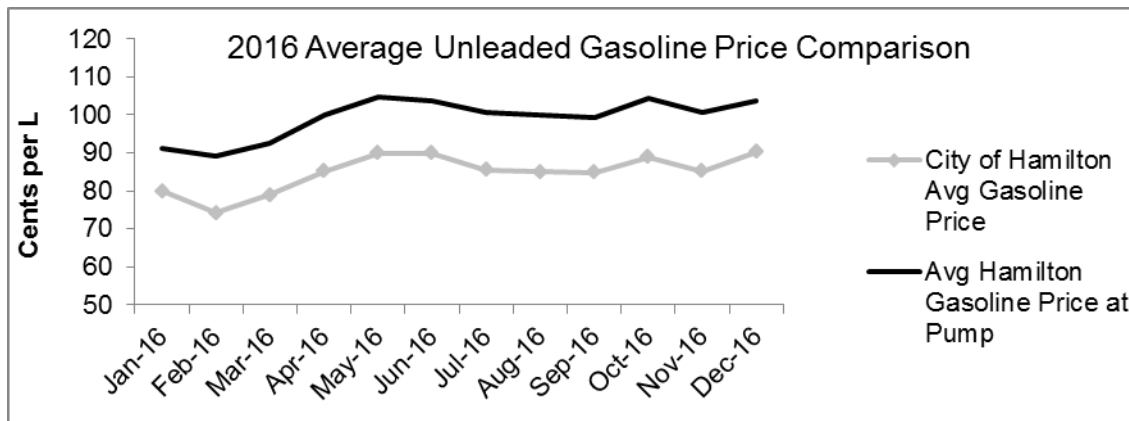
Wholesale purchase of diesel and gasoline offer lower prices than prices paid at the pump across the City. With data collected from reliable industry sources on average fuel pump prices in Hamilton, Figures 12 and 13 show the comparison between the average prices paid for diesel and gasoline purchased under City contracts versus the average prices paid by the public at fuel stations ("Pumps") throughout Hamilton.

Figure 12: Monthly Average Price of Diesel Paid by the City and at the Pump



\*Average monthly Diesel pump prices from data available by [Kent Group Ltd.](#)

Figure 13: Monthly Average Price of Gasoline Paid by the City and at the Pump



\*Average monthly Gasoline pump prices from data available by [Kent Group Ltd.](#)

Fuel purchases, as reported in the 2016 Annual Energy Report (PW17037) exclude DARTS and Hamilton Police Services. City departments used approximately 11 M litres of diesel, an 8% reduction from 2015, and approximately 2 M litres of gasoline, an increase of 6% over 2015. A large part of the decrease in diesel usage can be attributed to the increase in CNG usage for Transit buses.

The 2016 budget prices for diesel and gasoline were set at \$0.95 per litre and \$0.97 per litre, respectively. For 2016, the average diesel and gasoline prices ended below budget, with overall costs at 17% below budget. Figure 14 shows the 2016 results as compared to budget.

Figure 14: Fuel Costs and Consumption as Compared to Budget

2016	Diesel Cost (\$)	Diesel Consumption (L)	Gasoline Cost (\$)	Gasoline Consumption (L)
Budget (YTD)	\$ 11,790,760	12,411,328	\$ 2,186,890	2,254,526
Actual (YTD)	\$ 9,684,841	11,067,857	\$ 1,863,470	2,200,718
Variance (YTD)	\$ (2,105,919)	- 1,343,470	\$ (323,420)	- 53,808
2016 Budget Price	\$ 0.95		\$ 0.97	
Average Price Per Litre	\$ 0.88		\$ 0.85	

The following graphs (Figures 15 and 16) illustrate the market volatility of fuel over the past number of years for diesel and gasoline.

Figure 15: Actual Diesel Price per Litre Compared to Budget Price per Litre

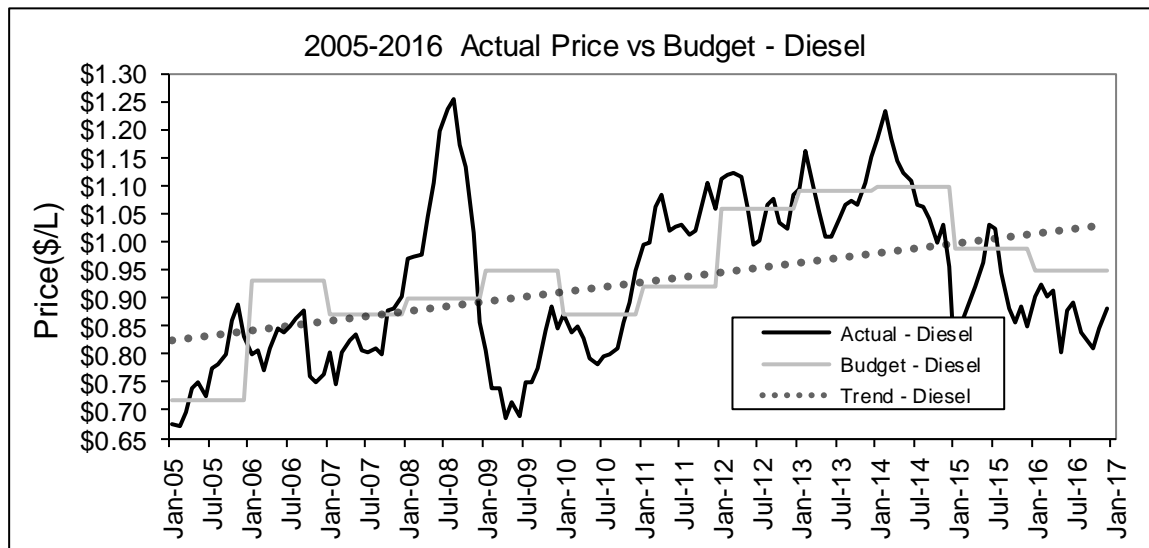
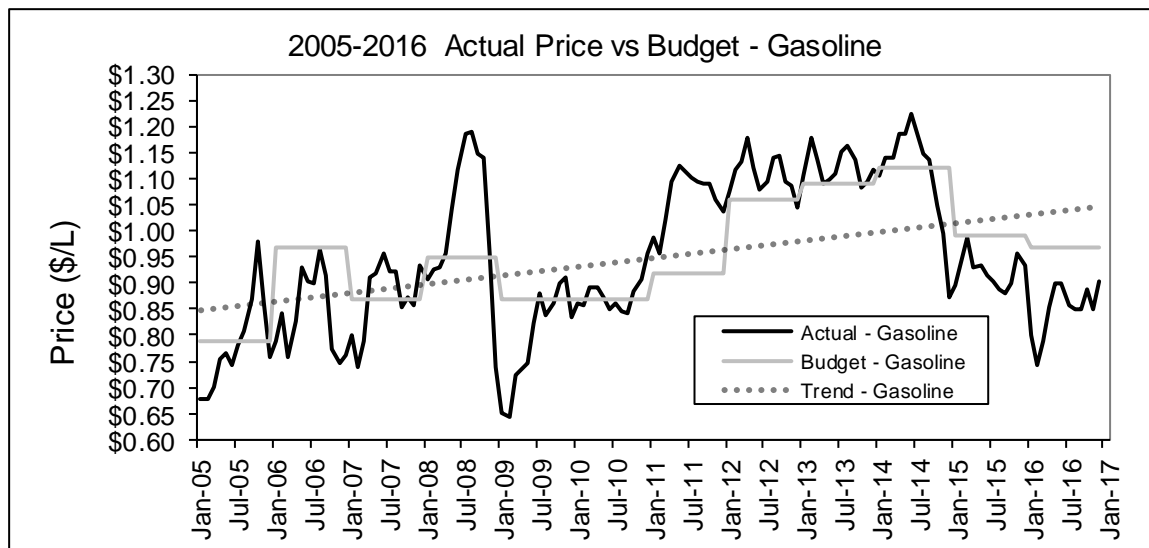


Figure 16: Actual Gasoline Price per Litre Compared to Budget Price per Litre



## Fuel Risk Management

One method to manage volatility is to hedge volumes for a forward term at a set price. Like other commodities, diesel fuel prices have been volatile for many years. In 2015, the City had hedged a portion of the City's diesel volume requirements for the 2015 and 2016 calendar years by transacting several financial NYMEX Heating Oil Swaps with the Royal Bank of Canada. Other factors that impact the final price include ongoing spot market volatility (on the volumes not hedged), currency exchange rates, federal taxes and delivery charges. This financial hedge product converts floating prices into fixed prices for a set volume over a set term. Market forecasts have made hedging less desirable in the past year and thus the current strategy for fuel purchasing in 2017 and onward does not include hedging forward terms against heating oil. Staff continues to monitor the market and to develop strategies for purchasing in order to capture agreeable market opportunities if and when they arise. Results of the 2016 hedge and its impact on pricing are shown in Figure 17 below.

Figure 17: 2016 Hedging Results and Impact on Pricing \$/litre (L)

	<b>Diesel Price (unhedged)</b>	<b>Hedging Adjustments Impact</b>	<b>Actual Price of Diesel</b>	<b>Diesel Budget</b>	<b>% Above/Below Budget</b>
Jan-16	\$ 0.7523	\$ 0.1495	\$ 0.9018	\$ 0.950	-5%
Feb-16	\$ 0.7425	\$ 0.1831	\$ 0.9256	\$ 0.950	-3%
Mar-16	\$ 0.7553	\$ 0.1463	\$ 0.9016	\$ 0.950	-5%
Apr-16	\$ 0.7465	\$ 0.1676	\$ 0.9141	\$ 0.950	-4%
May-16	\$ 0.8027	\$ 0.0995	\$ 0.9022	\$ 0.950	-5%
Jun-16	\$ 0.8085	\$ 0.0701	\$ 0.8786	\$ 0.950	-8%
Jul-16	\$ 0.7850	\$ 0.1083	\$ 0.8933	\$ 0.950	-6%
Aug-16	\$ 0.7581	\$ 0.0825	\$ 0.8406	\$ 0.950	-12%
Sep-16	\$ 0.7433	\$ 0.0811	\$ 0.8245	\$ 0.950	-13%
Oct-16	\$ 0.8009	\$ 0.0091	\$ 0.8100	\$ 0.950	-15%
Nov-16	\$ 0.8309	\$ 0.0152	\$ 0.8461	\$ 0.950	-11%
Dec-16	\$ 0.8807	\$ 0.0023	\$ 0.8830	\$ 0.950	-7%

The percentage of volume hedged ranged from 75% at the start of 2016, down to 16% by the end of December. No further hedges have been transacted. Figure 18 provides a profile of all transacted hedges that were active in 2016.

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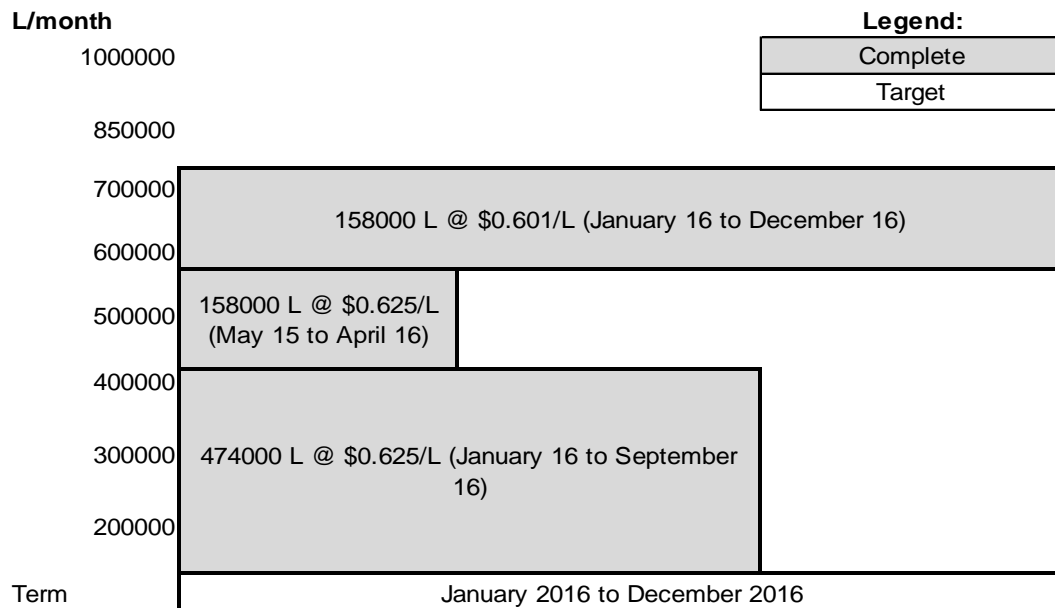
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Figure 18: City of Hamilton Fuel Hedge Profile (NYMEX Heating Oil)



### Fuel Market Update

The year 2016 began with international crude prices at historically low levels due to abundant production and ended with upward movement as the Organization of Petroleum Exporting Countries (OPEC) set production limits. Canadian production was impacted early in the year with the Alberta wildfires, but globally, prices remained low until the fourth quarter. Crude prices are likely to rise throughout 2017. While crude price is a component of diesel and gasoline price, other impacts to prices are the refining capacity (of crude oil to useable petroleum products) and thus the added costs for export, taxes and the value of the Canadian dollar. Pump prices in 2016 increased (mostly) in line with the increased price of crude and weakening dollar as refining costs and takes remained stable. The City purchases fuel on the wholesale market, thus limiting some additional costs to the price. In 2017, Ontario tax price components to the price are expected to increase with the introduction of the Cap and Trade program. Further weakening of the Canadian dollar is also a risk to prices.

### Commodity Stabilization Fund

In light of the volatile and rising fuel costs, a Commodity Stabilization Fund was established in 2011 by Council as a reserve to allow for commodity related budget over-runs. The use of this reserve is expected to occur when no other operating surplus is available to offset over budget commodity expenses. The reserve was established with an initial \$1.5 M contribution.

## **Contract Agents**

Managing the annual energy cost of over \$45 M requires on-going attention to detail as it relates to the volatile and ever changing regulatory environment, billing and supply contracts. In order to maximize available expertise, the City uses outside consultants (Contract Agents), in order to assist staff in negotiating the unstable and complex energy commodity and associated regulatory markets. The use of these Contract Agents has proven valuable in that they are immersed daily in the energy commodity markets and have specialized expertise with respect to monitoring and responding to market changes. With Council approval, the City has a professional services agreement with Aegent Energy Advisors to assist with the day-to-day management of the City's natural gas portfolio.

Additionally, the City reviews several market-based publications and engages with outside parties to further gather information on factors influencing pricing both domestically and globally.

## **Consistency with City Energy Commodity Hedging Policy and Goals**

The agreements entered into during the reporting period are consistent with the City's Commodity Price Hedging Policy and Goals:

- The agreements have provided for a price of natural gas that was more stable and, therefore, less risky than it would have been omitting the agreements.
- The actions taken through the authority of the Energy Commodity Policy have reduced uncertainty about energy costs, which has a direct impact on the City's financial position. It has also enabled staff to respond to favourable market conditions.
- Credit ratings for the City's primary natural gas suppliers remain above the minimum threshold outlined in the policy.
- Commodity hedging provides municipalities with added flexibility to potentially mitigate or manage potential price fluctuations.

## **Policy Reporting Requirements**

The General Manager, Finance and Corporate Services, shall report to Council at least once each fiscal year with respect to any and all energy commodity price hedging agreements and other energy commodity agreements in place. The report shall contain, at a minimum, all requirements as set out in O. Reg. 653/05 (as it exists from time to time) and shall include:

- 1) A statement about the status of the energy commodity price hedging agreements during the period of the report, including a comparison of the expected and actual results of using the agreements;
- 2) A statement by the General Manager, Finance and Corporate Services, indicating whether, in his opinion, all of the agreements entered, during the period of the report, are consistent with this Energy Commodity Policy relating to the use of financial agreements to address commodity pricing and costs;
- 3) An overview of any agreements with contract agents (including, without limitation, actual costs, services provided and frequency of use) and a statement by the General Manager, Finance and Corporate Services, indicating whether, in his opinion, all of these agreements are consistent with this Energy Commodity Policy with respect to the use of contract agents;
- 4) An overview of any co-operative energy purchasing initiatives and / or agreements and a statement by the General Manager, Finance and Corporate Services, indicating whether, in his opinion, all of these agreements are consistent with this Energy Commodity Policy with respect to the use of co-operative energy purchasing;
- 5) Such other information as Council may require; and
- 6) Such other information as the General Manager, Finance and Corporate Services, considers appropriate to include in the report.

The City of Hamilton's commitment to responsibly managing energy costs plays an important role in supporting the City's Strategic Plan by contributing to a prosperous and healthy community, providing valued and sustainable services and demonstrating innovation and leadership. Ongoing success of the energy program requires engagement of all Five Pillars of Our Culture: Collective Ownership, Steadfast Integrity, Sensational Service, Engaged, Empowered Employees and Courageous Change.

#### **Appendices and Schedules Attached**

None.

JS:TC:LC/mg:dt