INFORMATION REPORT

TO:	Chair and Members Audit, Finance and Administration Committee
COMMITTEE DATE:	June 11, 2018
SUBJECT/REPORT NO:	2017 Annual Energy Report on Commodity Price Hedging (FCS18055 / PW18043) (City Wide)
WARD(S) AFFECTED:	City Wide
PREPARED BY:	John Savoia (905) 546-2424, Extension 7298 Tom Chessman (905) 546-2424, Extension 2494 Linda Campbell (905) 546-2424, Extension 2810
SUBMITTED BY: **SIGNATURE:**	Brian McMullen Director, Financial Planning, Administration and Policy Corporate Services Department
SUBMITTED BY: **SIGNATURE:**	Rom D'Angelo, C.E.T.; CFM Director, Energy, Fleet and Facilities Management Public Works Department

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 (refer to Report PW14050) which now incorporates the City's previously separate Energy Commodity Policy into one comprehensive policy.

Information:

The City of Hamilton's 2017 Annual Energy 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.

Utility Rates and Commodity Strategies Results

The utility rates and commodity strategies results include Global Adjustment (GA) rate changes and natural gas hedging programs. For the 2017 calendar year, there was a $6.5M cost benefit.

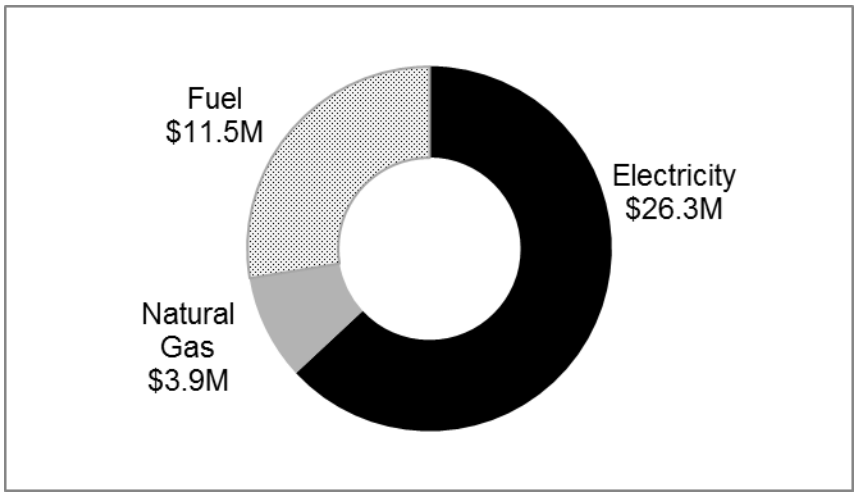
Figure 1: 2017 Utility Rates and Commodity Strategies Results

2017 Results	$M	% Levy	% Rate
Global Adjustment	5.98	22%	78%
Natural Gas Hedging	0.51	87%	13%
Total	6.49	28%	72%

Overall Costs

In the City's, 2017 Annual Energy Report (refer to Report PW18041), the total actual energy costs for electricity, natural gas and fuels were reported at $41.7M. This is a 9% decrease from 2016 energy costs. The breakdown is shown in Figure 2.

Figure 2: 2017 Total Energy Costs (Electricity, Natural Gas & Fuel) in Millions (M)



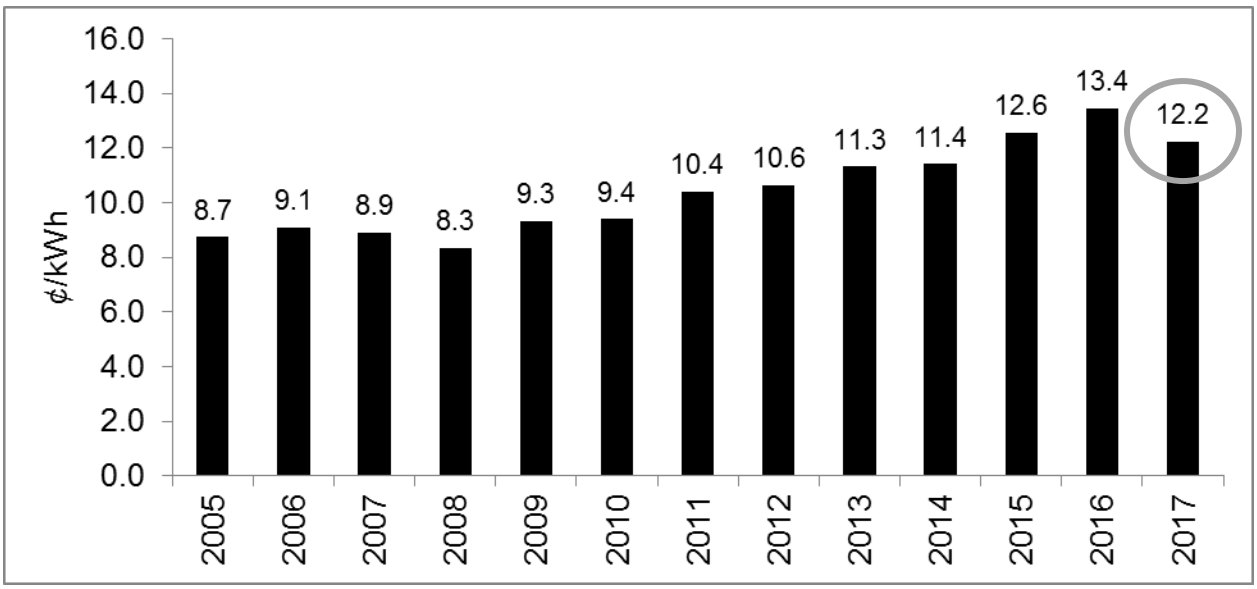
The electricity and natural gas costs (including those from district heating and cooling) are incurred by City-owned buildings / facilities, Hamilton Water, Public Works Operations and Street and Traffic lighting. It excludes CityHousing Hamilton. Utilities include Alectra Utilities, Hydro One and Union Gas. Fuel includes diesel, unleaded gasoline and CNG for all Fleet, Operations and Transit vehicles but does not include Hamilton Police Services or Darts. Sites with only partial data were excluded.

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 Alectra Utilities and 15% from Hydro One. While the utility rates may vary between the local distribution companies, both are regulated by the Ontario Energy Board (OEB) and must seek approvals for any rate or cost of service adjustments.

In 2017, the City's overall expenditure for electricity was $26.3M. Overall, electricity costs in 2017 decreased by approximately 13% versus 2016. There was a decrease of 4% in overall electrical consumption in 2017 compared to 2016. The City's overall average price of electricity per kilowatt-hour (kWh) decreased from 13.4 cents/kWh in 2016 to 12.2 cents/kWh in 2017. The average price (cents/kWh) for electricity, year over year, from 2005 to 2017 is outlined in Figure 3.

Figure 3: City of Hamilton Annual Average Electricity Cost



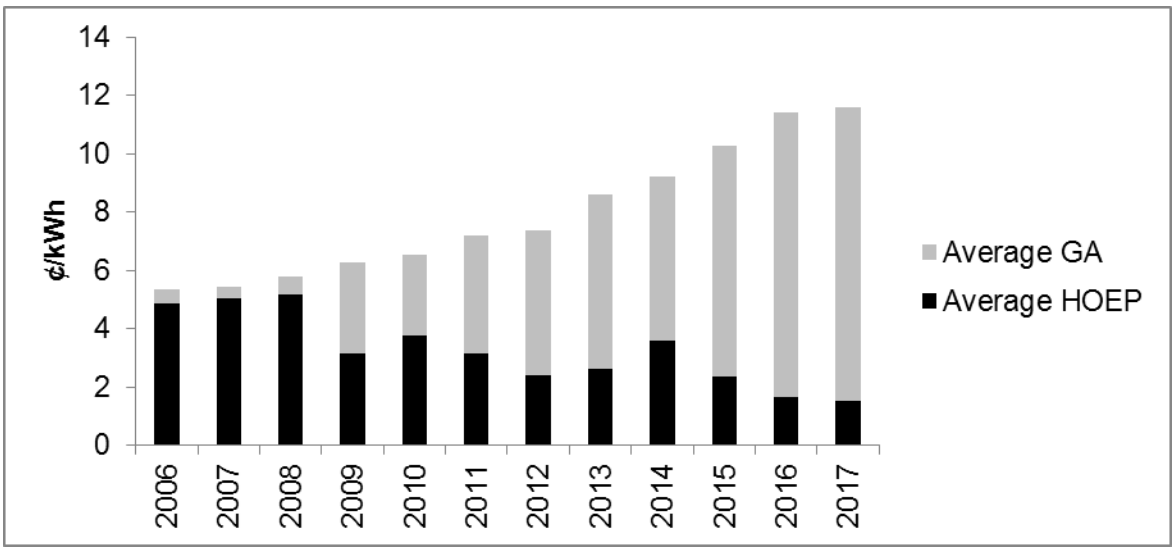
There are a variety of factors that can impact electricity cost, some of which are consumption and process changes, regulatory changes, market activity and weather.

The largest impact to prices in Ontario for 2017 was twofold: the milder summer, where the cooling degree days were 40% less than those from 2016, thereby lowering demand for electricity in the summer months; and the introduction of the Fair Hydro Plan, a regulatory program that lowered provincial hydro costs to small commercial rate class and residential customers.

The electricity market in Ontario itself 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 and demand management programs 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 fixing the price on forward terms for the HOEP is possible, doing so 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.

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



The annual average HOEP was 1.6 cents/kWh in 2017, which was a 7% decrease versus 2016. The HOEP decrease in 2017 was offset by increases in the GA. The average GA price in 2017 was 10.0 cents/kWh. This represents a 3% increase versus 2016. The overall combined commodity price for electricity (11.6 cents/kWh) amounted to a 2% increase in 2017 when compared to 2016.

However, as noted above, the total overall unit price of electricity was down from 2016 partly because of the change in regulatory rates via Ontario's Fair Hydro Plan.

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. Most 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 to the GA as a Class B customer. The GA price that Class B customers pay is posted monthly by the IESO. High electrical demand customers, typically industrial, qualify for a different billing methodology called Class A.

The City was able to move some of its largest accounts to Class A over the past several years. Class A sites are billed based on their specific demand profile as set during a peak setting period. Class A customers have the ability to impact their costs by reducing consumption during hours of provincial peak demand. Class A sites at 900 Woodward Avenue (Hamilton Water); the Municipal Recycling Facility, FirstOntario Centre, Central Utilities Plant (CUP) and Greenhill Avenue Pump Station (Hamilton Water) were joined by two new sites in July of 2017, Tim Horton's Field and Kenilworth Pump Station (Hamilton Water). The results for 2017 were a cost benefit of $5.98M as shown in Figure 5.

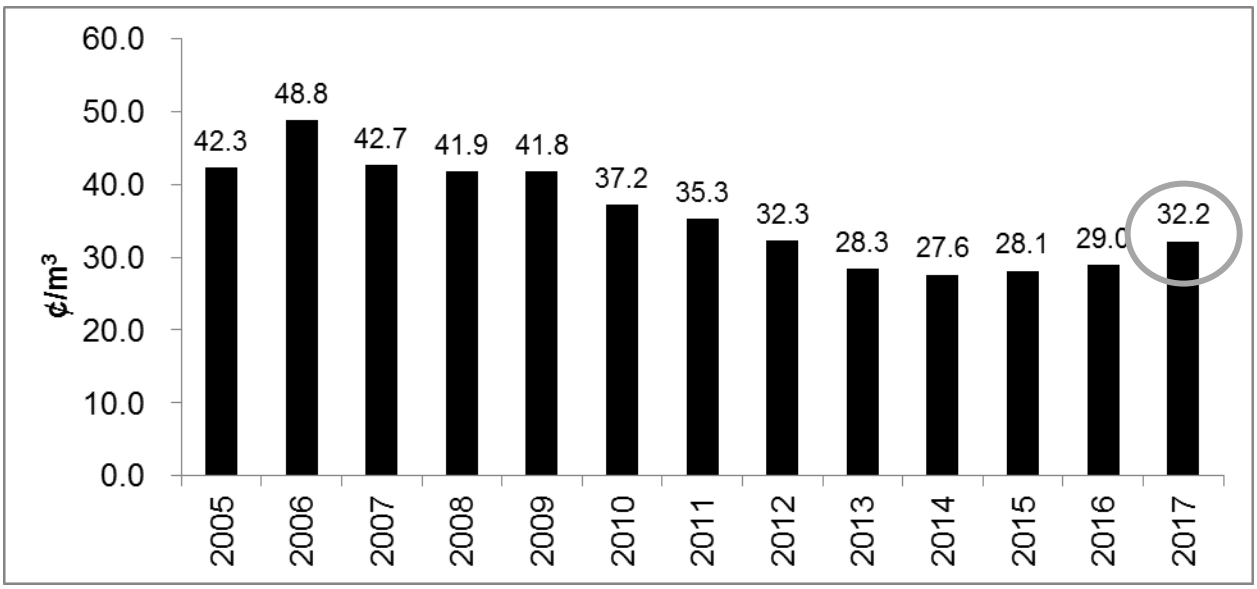
Figure 5: Global Adjustment Class A Results 2011-2017

Year	Standard Global Adjustment Charge (Class B)	Actual Global Adjustment Charge (Class A)	Cost Benefit
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
2017	$ 10,218,507	$ 4,242,405	$ 5,976,103
Total	$ 45,134,173	$ 23,056,237	$ 22,077,936

Natural Gas

The City's overall expenditure for 2017 natural gas, including the commodity costs and utility charges for delivery, transportation and storage was $3.9M. This is an increase of 12% over 2016 costs as reported in the 2017 Annual Energy Report (PW18041). There was an increase of less than 1% in natural gas consumption compared to 2016 numbers. The overall average unit price was 32 cents per cubic metre (¢/m^3), which was an 11% increase over 2016's price of 29 ¢/m^3. The average price for natural gas, year over year, from 2005 to 2017 is outlined in Figure 6.

Figure 6: City of Hamilton Annual Average Natural Gas Cost



Although the City's consumption was on par with the previous year, the primary reason for the increase in natural gas costs for 2017 can be attributed to the Cap and Trade program that was introduced in January 2017. The program, designed to meet provincial GHG emission reduction targets, meant consumers were charged for the price of carbon. For Hamilton consumers, the price was embedded within the "delivery" charge on Union Gas bills as approved by the Ontario Energy Board (OEB).

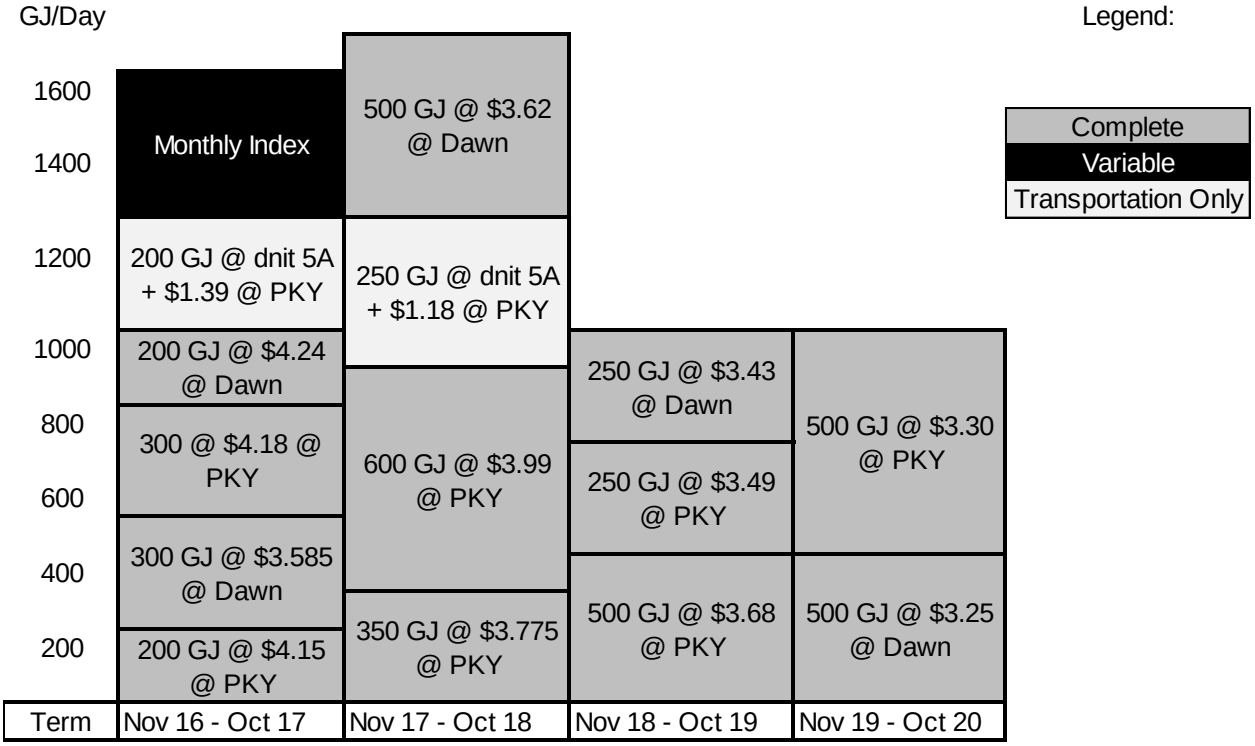
Natural Gas Risk Management

Natural gas can be a volatile commodity. There are many factors that can influence prices in natural gas markets including weather, supply, demand, geo-political events and changes to refining and extraction technologies. 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 competitive purchasing. Overall, the procurement strategy is dynamic as staff, in conjunction with industry experts and the retained consultancy firm; make purchasing decisions based on market conditions. A portion of natural gas supply may be purchased as much as two to three 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 results in better budget predictability and protection against spot market fluctuations, particularly during extreme weather conditions or unforeseen market events.

The City purchases natural gas for City-owned facilities (excluding CityHousing Hamilton) and for compressed natural gas (CNG) used to fuel transit vehicles. The average 2017 price for the natural gas commodity only was $3.84 per gigajoule (GJ) ($0.149/$m^3$) including a blend of hedged and unhedged volumes. This does not include any Union Gas charges such as delivery or storage. In 2017, the Cap and Trade charge was also included within the Union Gas delivery charge.

For the majority of 2017, 63% of natural gas supply was fully hedged, with a further 13% of transportation only hedged up until the end of October 2017. This was based on 2017 volume requirements. As of the end of 2017, further volume was hedged for the periods starting November 1, 2017, November 1, 2018 and November 1, 2019. 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 (as of December 2017)



Notes:

- 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

To evaluate the performance of the hedging program, the City benchmarks its natural gas hedging activities against the procurement program offered by the Association of Municipalities of Ontario / Local Authority Services (AMO / LAS). Although the City has enough volume to allow for wholesale purchase from market suppliers, smaller municipalities may not have the volume or expertise to manage their own programs and may benefit from and highly valued AMO / LAS purchasing program. 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

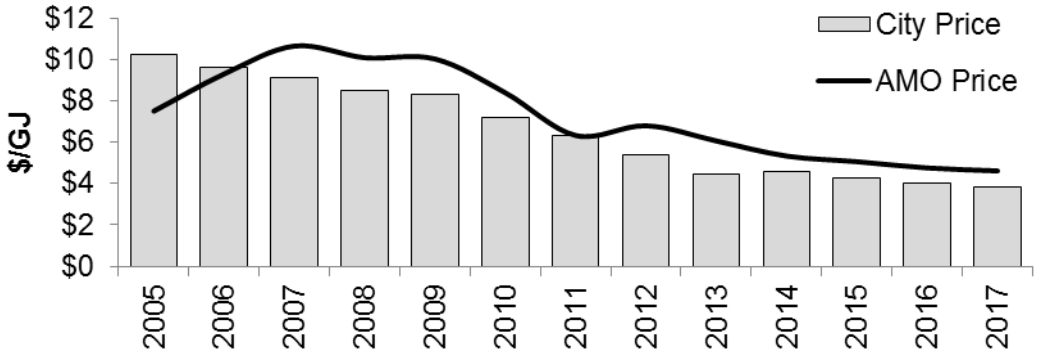


Figure 9: Performance of Natural Gas Hedge Activity compared to AMO/LAS

Natural Gas Hedging Performance Results	2017 Results*	Cumulative Results*
Levy (Tax) Supported Budget	$ 446,304	$ 6,059,687
Rate Supported Budget	$ 66,946	$ 1,072,607
Total Cost Benefit:	$ 513,249	$ 7,132,294

*Performance relative to AMO/LAS natural gas hedging program since 2007.

Natural Gas Agreements for Supply, Transportation, Storage and Delivery

In 2017, the City had master agreements for natural gas supply in place with Shell Energy North America (Canada) Inc., EDF Trading North America, LLC, Tidal Energy Marketing Inc. and Royal Bank of Canada. All current supply counterparties have credit ratings that are compliant with the Corporate Energy Policy.

In addition, the City has several contracts in place with Union Gas that are required to facilitate the transportation, delivery and storage of the City's natural gas supply. The utility agreements include direct purchase agreements for City sites, a T1 rate storage contract for managing Transit CNG and M13 rate production contract for renewable natural gas.

Direct Purchase Agreements (DPA) with Union Gas

DPAs outline the terms of service for delivery of natural gas, including designated delivery points, 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 2017, the agreements and parameters were:

- SA9369 for 151 GJ/day – 29 miscellaneous City natural gas accounts which run from February 1 to January 31 each year.
- SA7020 for 1,173 GJ/day – 201 miscellaneous City natural gas accounts which run from November 1 to October 31 each year.
- T1 for 439 GJ/day (increased from 320 GJ/day as of September 2017) - For Transit's CNG bus fleet and transit site. The contract runs September 1 to August 31 each year.

Each DPA has its own 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. For the T1 contract, additional volume (over the DCQ) is typically delivered to accommodate for increases in fleet size throughout the year.

Natural Gas Market

Overall, natural gas commodity prices in 2017 were relatively flat. While there were some seasonal fluctuations, particularly with a cold start to the year, the majority of the year saw limited volatility on the day-to-day markets. Daily Dawn (Ontario pricing hub) prices in the first quarter averaged in the $4 per GJ range, where the summer averaged $3.50 per GJ. Weather has a big impact on short-term pricing and extreme weather for most of 2017 was a non-event. The milder summer reduced typical demand for natural gas-fired electrical generation, which, despite Hurricane Harvey shutting down some Gulf production, limited any major price volatility. A plentiful North American storage position, coupled with strong production also kept downward pressure on prices. However, the cold end to 2017 and prolonged colder temperatures that have prevailed into 2018 impacted prices and lead to a greater drawdown of the storage position. Production in North America is expected to be steady throughout 2018 which should limit upward pressure on day pricing. However, unexpected weather events or as speculated, a hot summer, could cause prices to rise in the short and long terms. Changes to demand, production levels, pipeline capacity pressures and / or a decrease to the value of the Canadian dollar will also impact pricing. Long-term pricing gradually fell throughout 2017 which gave opportunities to hedge forward terms at prices that were favourable.

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 due to changes in utility rates (i.e. Delivery), while further reducing the footprint of the City's facilities by reducing carbon emissions.

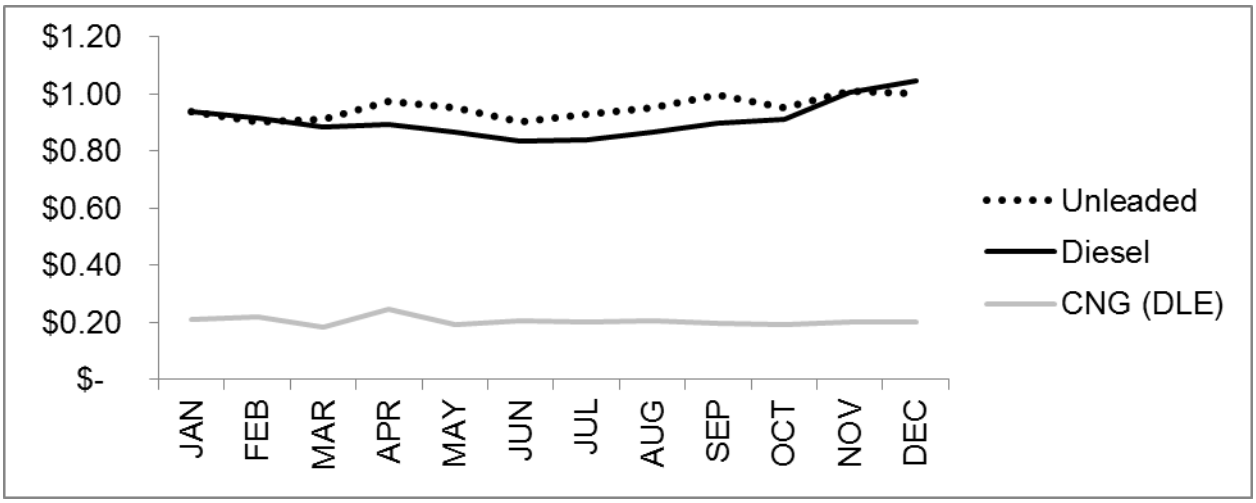
Compressed Natural Gas (CNG)

Natural gas is also purchased for Transit's fleet of natural gas buses. The CNG station at the Mountain Transit Centre services the fleet of existing and new natural gas buses for the City.

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 2017 contract term (September 2017 to August 2018); the T1 was allotted 9,941 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 of natural gas buses totalled 85 by the end of 2017 and is expected to increase in the coming years. Natural Gas has a lower cost compared to diesel; however, it does operate at approximately 75% efficiency per diesel litre equivalent when compared to diesel bus usage. Despite its lower efficiency, its lower cost and lower GHG emissions is of benefit to the City. In 2017, the total cost of natural gas for the buses was approximately $910,500. Figure 10 shows the City's monthly fuel prices with CNG price converted to diesel equivalent (DLE).

Figure 10: 2017 Monthly Average Fuel Prices for Diesel, Unleaded Gasoline and CNG



When converted to diesel equivalent dollars and adjusting for efficiency, Transit spent $1.9M less in fuel costs using CNG buses than they would have using only diesel buses.

Figure 11: Cost Benefit of CNG as Compared to Diesel

Diesel Litre Equivalent (L)		4,195,759
Number of DLE Litres of Diesel Required*		3,125,840
Diesel cost at $.91/L (2017 Avg price)	$	2,844,515
2017 CNG Cost	$	910,464
Cost Benefit of CNG	$	1,934,051

* Average of CNG buses run at 75% of DLE compared to average DSL bus

Traditional Fuel Supply

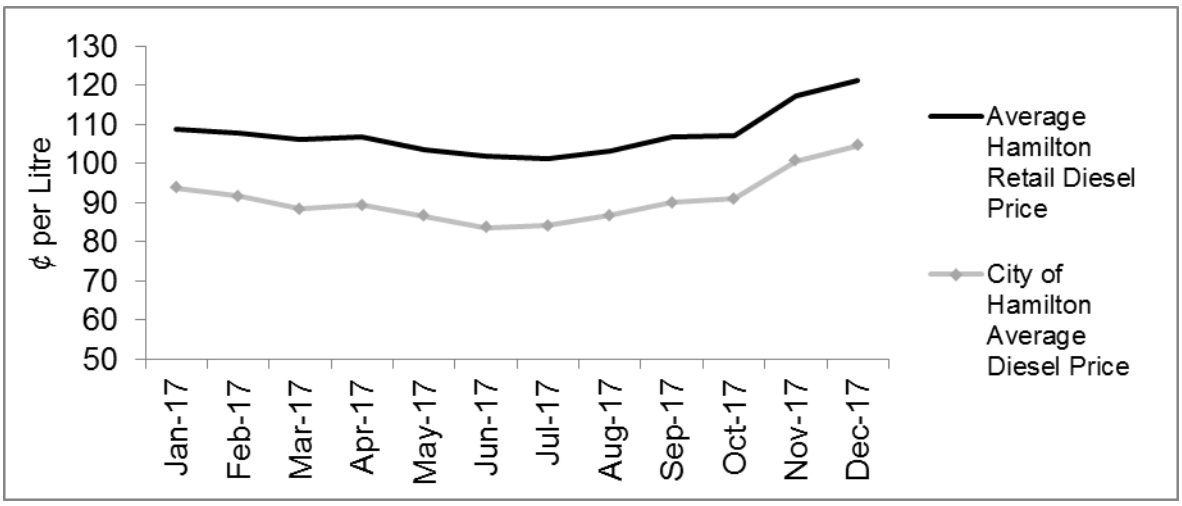
The City of Hamilton purchases diesel and gasoline fuel for its fleet of vehicles such as buses, waste collection vehicles, snow removal trucks, street sweepers, forestry and parks vehicles, as well as Fire and Hamilton Paramedic Services vehicles. In addition, the City purchases fuel for Hamilton Police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

In 2017, the City's fuel procurement strategy involved utilizing a contractual bulk supply agreement with Suncor Energy Products Partnership. Fuel contracts are reviewed annually and based on pricing, deliverability and fuel types, the strategy can be adjusted accordingly.

The pricing arrangement for 2017 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. Suncor Energy Products Partnership has a credit rating that is compliant with the Corporate Energy Policy.

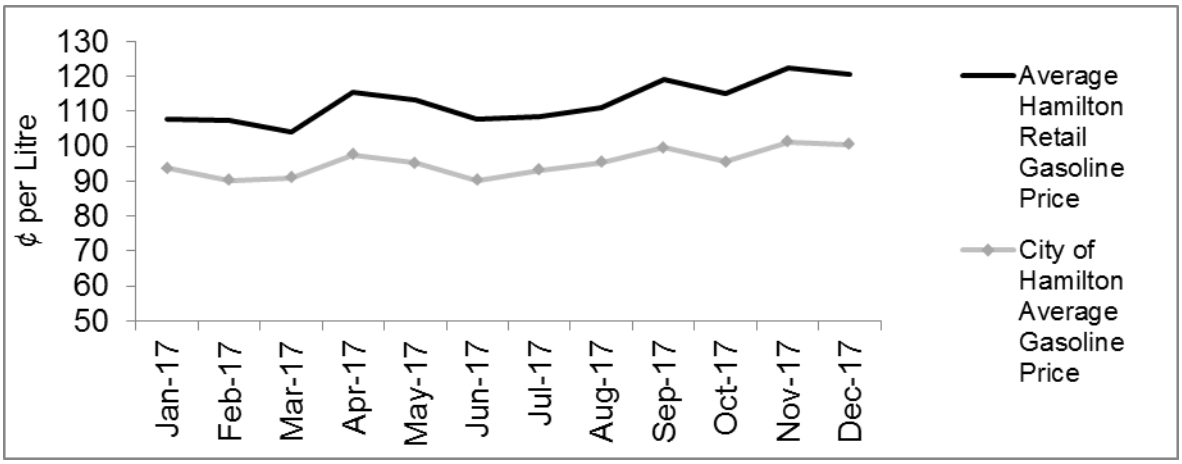
Wholesale purchase of diesel and gasoline offer lower prices than those at public fuel stations across the City. With data collected from reliable industry sources on average fuel pump prices in Hamilton, Figures 12 and 13 show the comparison between the average prices paid for diesel and gasoline purchased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

Figure 12: 2017 Monthly Average Price of Diesel Paid by the City versus at the Pump



*Average Diesel retail pump prices from data available by Kent Group Ltd.

Figure 13: 2017 Monthly Average Price of Gasoline Paid by the City versus at the Pump



*Average Gasoline retail pump prices from data available by Kent Group Ltd.

Fuel purchases, as reported in the 2017 Annual Energy Report (refer to Report PW18041), excludes Hamilton Police Services. City departments used approximately 9.4 million litres of diesel, a 15% reduction from 2016 and approximately 2.2 million litres of gasoline, a 3% decrease from 2016. A large part of the decrease in diesel usage can be attributed to the increase in CNG usage for Transit buses.

The 2017 budget prices for diesel and gasoline were set at $0.94 per litre and $1.00 per litre, respectively. For 2017, the average diesel and gasoline prices ended below budget with overall costs at 16% below budget. Figure 14 shows the 2017 results as compared to budget.

Figure 14: 2017 Fuel Costs and Consumption as Compared to Budget

Fuels	2017 Budget	2017 Actual	Variance (Actual - Budget)
Diesel Consumption (L)	11,030,053	9,404,408	- 1,625,645
Diesel Costs ($)	$ 10,368,250	$ 8,544,954.06	-$ 1,823,296
Diesel Average Unit Cost ($/L)	$ 0.94	$ 0.91	-$ 0.03
Gasoline Consumption (L)	2,256,080	2,138,446	- 117,634
Gasoline Costs ($)	$ 2,256,080	$ 2,034,279	-$ 221,801
Gasoline Average Unit Cost ($/L)	$ 1.00	$ 0.95	-$ 0.05
Total Consumption (L)	13,286,133	11,542,854	- 1,743,278
Total Costs ($)	$ 12,624,330	$ 10,579,233	-$ 2,045,097

Fuel Risk Management

Like other commodities, diesel and gasoline markets are volatile and are impacted by many localized and geopolitical factors. One method to manage volatility is to hedge volumes for a forward term at a set price. As hedge products for diesel and gasoline are not available, financial hedges for heating oil do exist as a way to manage fluctuations in the market. Although the City has hedged in the past and staff continues to monitor the oil markets for favorable opportunities, no volumes were hedged in 2017 or are currently hedged.

Fuel Market Update

2017 began with upward pressure on Crude oil prices as Organization of Petroleum Exporting Countries (OPEC) had set production limits in late 2016. However, increased U.S. production and global crude inventories saw prices lower and level off for the first half of 2017. Prices started to rise in the latter half of 2017 due to increased demand for refined products like gasoline and diesel. Upward pressure on North American crude oil prices began to increase in August with Hurricane Harvey making landfall in the Gulf as it disrupted a large portion on U.S. refining capacity (of crude oil to useable petroleum products). This greatly impacted prices for diesel and gasoline in the last quarter of 2017 where several maintenance and pipeline-related issues led to constraints on refined supply. Crude prices have been on an upward trend since the end of 2017 and are expected to rise throughout 2018. While crude oil prices are a component of diesel and gasoline price, other impacts to prices are the refining capacity, costs for export, the value of the Canadian dollar, marketing and carbon initiatives, such as the Cap and Trade program. Purchasing wholesale fuel does help insulate the City from some of the costs associated with pump prices, largely the marketing fees.

Commodity Stabilization Reserve

In light of the volatile and rising fuel costs, a Commodity Stabilization Reserve (110043) 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 $1.5M contribution.

Contract Agents

Managing the annual energy cost of over $40M requires on-going attention to detail as it relates to an ever-changing energy industry. 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 markets and associated regulatory frameworks. 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 Agent 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 have 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 commodity 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

Not applicable.

JS/TC/LC/dt