

# ONTARIO ENERGY REPORT Q3 2016

JULY – SEPTEMBER 2016  
OIL AND NATURAL GAS

## Regular Gasoline and Diesel Provincial Average Retail Prices (\$/L)

Regular Gasoline	\$1.01
Diesel	\$0.93

Source: Ministry of Energy Fuel Prices.

## Natural Gas Effective Prices (¢/m<sup>3</sup>)

Union Gas (southern)	9.72¢
Enbridge	5.57¢

Source: OEB Natural Gas Rates effective July 1, 2016.

## Average Natural Gas Spot Price (\$/GJ)

Dawn (ON)	\$3.48
Henry Hub (US)	\$3.56
AECO (AB)	\$2.21

Source: Dawn and AECO from Canadian Enerdata Ltd.;  
Henry Hub from U.S. Energy Information Administration.

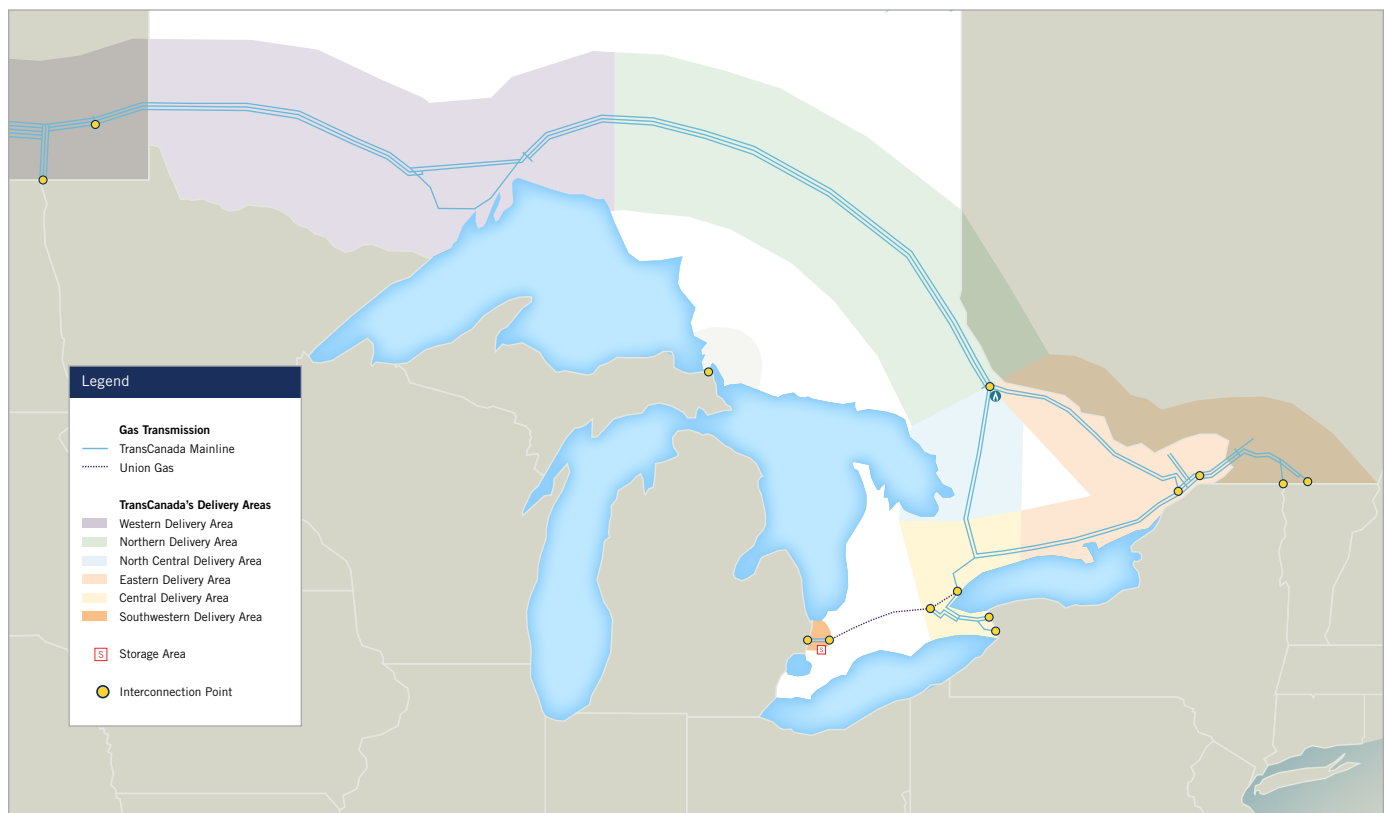
## Eastern Canada Natural Gas Storage Balance (at quarter end)

# 257.8 Bcf

(for week ending September 23, 2016)

Source: Canadian Enerdata Ltd.  
In Eastern Canada, natural gas is stored primarily at Dawn hub near Sarnia.

## Natural Gas Transmission Infrastructure



# Regular Gasoline Retail Prices

## Q3 Ontario Average Regular Gasoline Retail Price (\$/L)

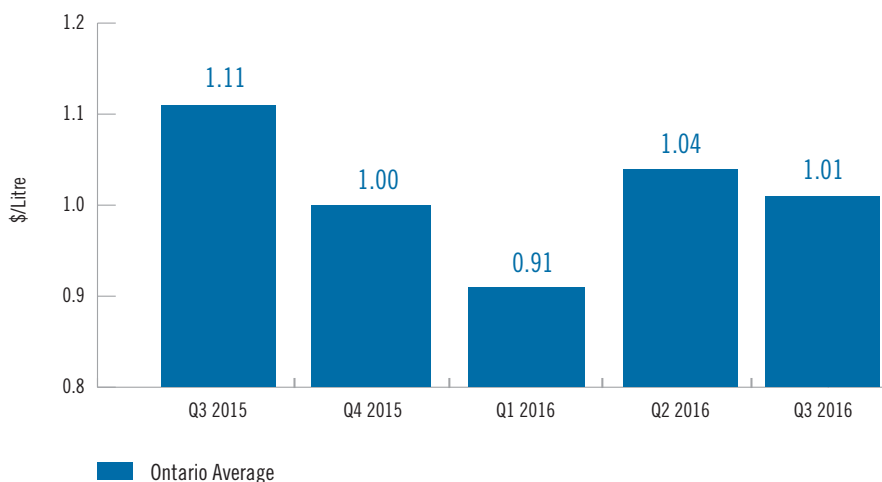
Year (Q3)	Ontario Average	Southern Ontario Average	Northern Ontario Average	Toronto Average	Ottawa	Sudbury	Thunder Bay
2007	1.00	0.99	1.07	0.99	1.00	1.01	1.14
2008	1.27	1.27	1.34	1.27	1.24	1.30	1.36
2009	0.95	0.94	1.01	0.95	0.91	0.97	1.05
2010	1.02	1.01	1.06	1.02	1.01	1.04	1.08
2011	1.28	1.27	1.32	1.28	1.27	1.31	1.32
2012	1.28	1.27	1.33	1.28	1.24	1.32	1.35
2013	1.30	1.29	1.35	1.30	1.29	1.34	1.37
2014	1.32	1.31	1.39	1.32	1.29	1.38	1.41
2015	1.11	1.10	1.19	1.12	1.08	1.15	1.24
<b>2016</b>	<b>1.01</b>	<b>1.00</b>	<b>1.07</b>	<b>1.01</b>	<b>0.98</b>	<b>1.03</b>	<b>1.15</b>

Source: Ministry of Energy Fuel Prices. All prices in Current Dollars per litre. Provincial, Southern and Northern Ontario averages are weighted by population.

Toronto<sup>1</sup> regular unleaded gasoline retail prices in Q3 2016 were 10.6 cents per litre (¢/L) lower than in Q3 2015. This was the result of lower refining margins (-9.0 ¢/L), lower taxes (-1.2 ¢/L), lower retail margins (-0.2 ¢/L) and lower crude oil costs (-0.1 ¢/L). Crude oil costs would have risen 0.1 ¢/L had it not been for a 0.3% increase in the value of the Canadian dollar relative to the U.S. dollar from Q3 2015 to Q3 2016. Canadian crude oil and wholesale gasoline costs are affected by the CDN/US exchange rate because these commodities are traded on a North American and international basis.

Note: Retail gasoline prices are affected by crude oil prices, wholesale gasoline prices and competition in the local retail gasoline market. Prices vary from city to city because of differences in market size and structure, costs and the degree of local competition.

## Ontario Average Regular Gasoline Price



1. Toronto was selected for the pump price analysis because it is the largest gasoline market in Ontario.

# Retail Diesel Prices

## Q3 Ontario Average Diesel Retail Prices (\$/L)

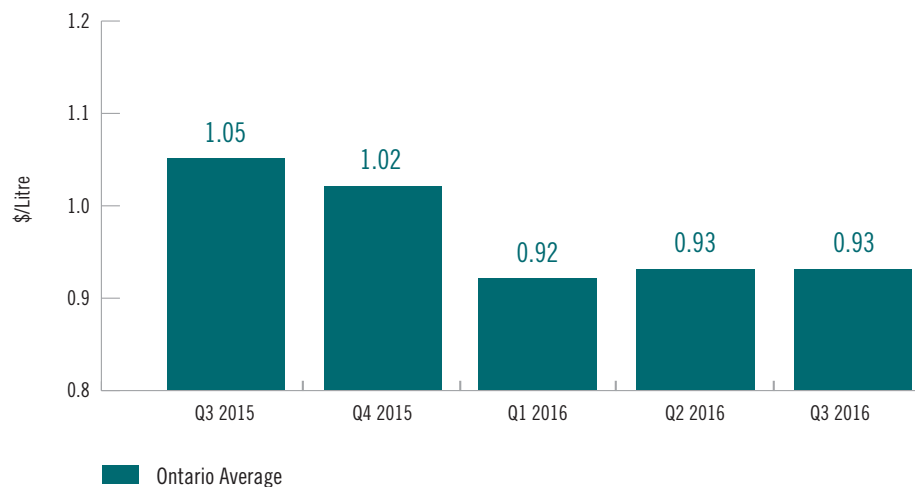
Year (Q3)	Ontario Average	Southern Ontario Average	Northern Ontario Average	Toronto Average	Ottawa	Sudbury	Thunder Bay
2007	0.95	0.95	0.97	0.95	0.95	0.96	N/A
2008	1.33	1.32	1.37	1.32	1.33	1.36	1.37
2009	0.89	0.88	0.91	0.88	0.89	0.91	0.91
2010	0.99	0.99	1.01	0.99	1.00	1.00	1.01
2011	1.23	1.23	1.24	1.23	1.24	1.25	1.24
2012	1.21	1.21	1.25	1.21	1.22	1.23	1.27
2013	1.25	1.25	1.29	1.25	1.27	1.28	1.33
2014	1.28	1.27	1.32	1.27	1.29	1.28	1.38
2015	1.05	1.04	1.08	1.05	1.04	1.05	1.10
<b>2016</b>	<b>0.93</b>	<b>0.93</b>	<b>0.98</b>	<b>0.93</b>	<b>0.92</b>	<b>0.92</b>	<b>1.04</b>

Source: Ministry of Energy Fuel Prices. All prices in Current Dollars per litre. Provincial, Southern and Northern Ontario averages are weighted by population.

Toronto<sup>2</sup> retail diesel prices in Q3 2016 were 11.5 ¢/L lower than in Q3 2015. This was the result of lower refining margins (-5.4 ¢/L), lower retail margins (-4.4 ¢/L), lower taxes (-1.3 ¢/L) and lower crude oil costs (-0.1 ¢/L). Crude oil costs would have risen 0.1 ¢/L had it not been for a 0.3% increase in the value of the Canadian dollar relative to the U.S. dollar from Q3 2015 to Q3 2016. Canadian crude oil and wholesale diesel costs are affected by the CDN/US exchange rate because these commodities are traded on a North American and international basis.

Note: Retail diesel prices are affected by crude oil prices, wholesale diesel prices and competition in the local retail diesel market. Prices vary from city to city because of differences in market size and structure, costs and the degree of local competition.

### Ontario Average Retail Diesel Price



2. Toronto was selected for the pump price analysis because it is the largest diesel market in Ontario.

## Natural Gas Effective Price for Enbridge and Union<sup>3</sup>

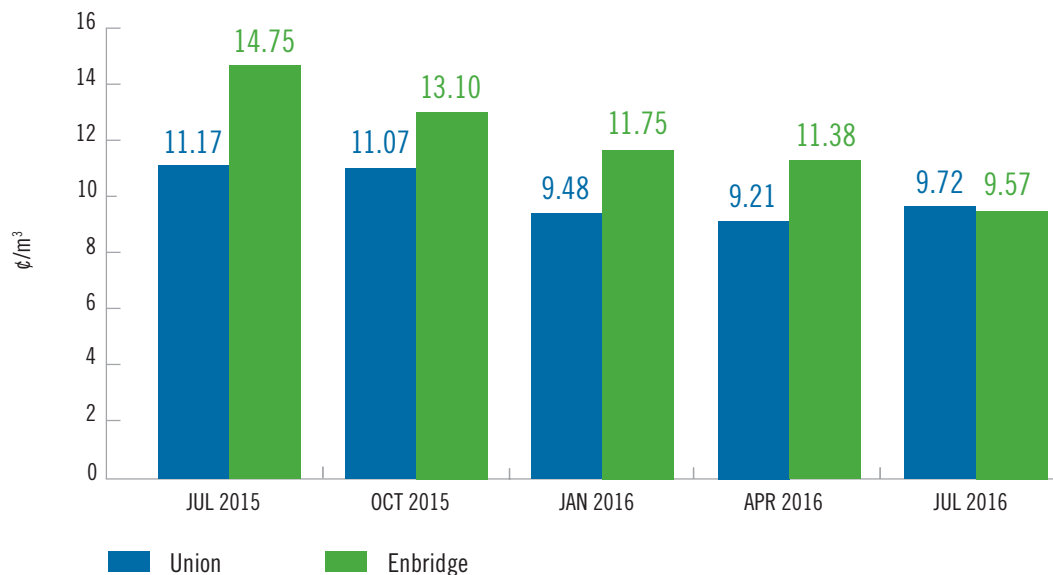
Q3 ¢/m <sup>3</sup>	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Union Gas <sup>4</sup>	27.50	36.76	15.34	13.09	13.77	8.80	11.85	22.59	11.17	<b>9.72</b>
Enbridge	26.23	38.15	14.71	16.21	13.08	8.47	12.90	18.52	14.75	<b>9.57</b>

Source: OEB Natural Gas Rates effective July 1, 2016.

The rate adjustment that took place for the third quarter, effective July 1, 2016, includes an adjustment to the gas supply charge, which is based on a forecast of market prices over the next 12 months. It also includes an update to the cost adjustment factor, which is the mechanism to account for any differences between forecast and actual commodity costs.

Union's effective price increased from the previous two quarters due to a higher cost adjustment factor and an increase in the commodity price of natural gas. The decline in Enbridge's price was due to a lower forecast commodity cost, which offset a higher cost adjustment for previous undercharging.

**Natural Gas Effective Prices by Quarter (¢/m<sup>3</sup>)**

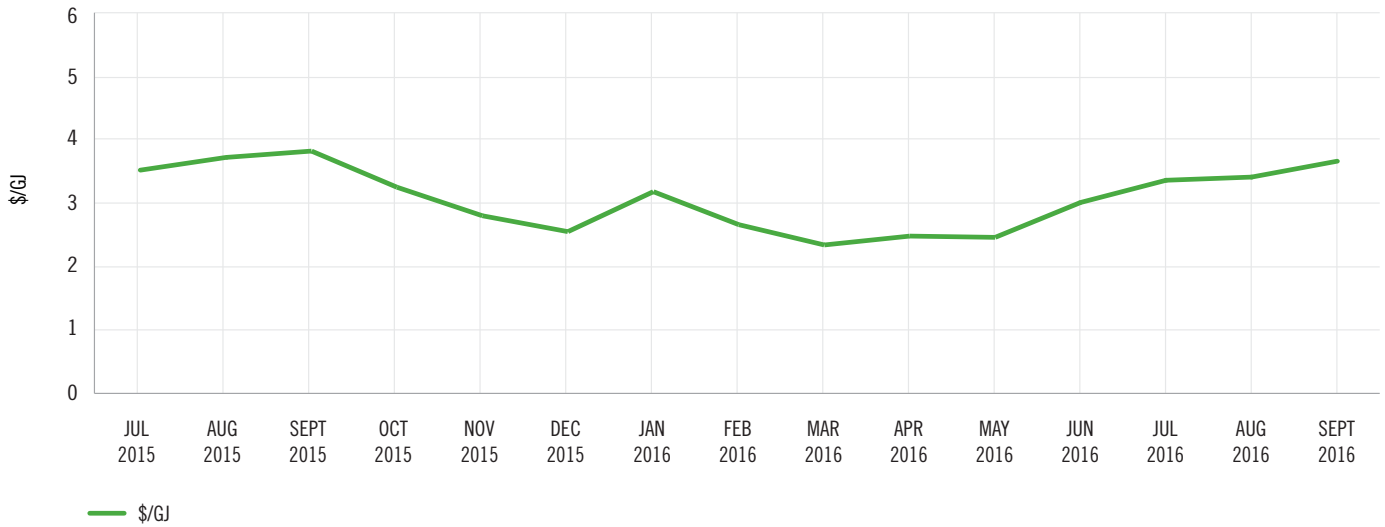


3. Enbridge and Union are highlighted because they serve the vast majority of customers in Ontario. For more information on the Ontario Energy Board's Quarterly Rate Adjustment Mechanism (QRAM) prices please see [www.ontarioenergyboard.ca/OEB/Consumers/Natural+Gas/Natural+Gas+Rates](http://www.ontarioenergyboard.ca/OEB/Consumers/Natural+Gas/Natural+Gas+Rates).

4. Reflects Union Gas' Southern Rate Zone

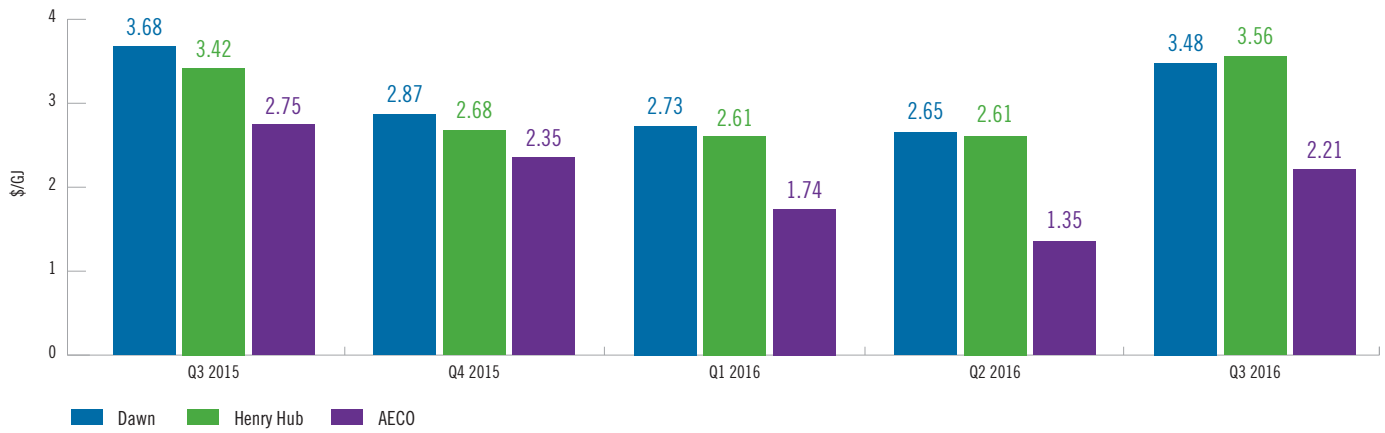
# Average Natural Gas Spot Prices

Monthly average natural gas spot prices at Dawn, ON (\$/GJ)



Source: Canadian Enerdata Ltd.

Quarterly average natural gas spot prices at select trading hubs (\$/GJ)



Source: Dawn and AECO prices from Canadian Enerdata Ltd.; Henry Hub prices from U.S. Energy Information Administration.

### Quarterly average natural gas spot prices at select trading hubs (\$/GJ)

Trading Hub	Q3 2015	Q4 2015	Q1 2016	Q2 2016	Q3 2016
Dawn (ON)	3.68	2.87	2.73	2.65	3.48
Henry Hub (US)	3.42	2.68	2.61	2.61	3.56
AECO (AB)	2.75	2.35	1.74	1.35	2.21

Source: Dawn and AECO from Canadian Enerdata Ltd.; Henry Hub from U.S. Energy Information Administration.

Natural gas prices at Dawn hub were approximately 6% lower in Q3 2016 than in the same quarter last year. Production in regions exporting natural gas to Ontario was very strong in Q3 2016 and supply remains strong.

### Annual average natural gas spot prices at select trading hubs (\$/GJ)

Trading Hub	2015	2016 to end of Q3
Dawn (ON)	3.56	2.95
Henry Hub (US)	3.16	2.92
AECO (AB)	2.56	1.76

Source: Dawn and AECO from Canadian Enerdata Ltd.; Henry Hub from U.S. Energy Information Administration.

### Natural gas price forecasts for select trading hubs, 2016–2018

Trading Hub	2016	2017	2018
Dawn (ON)	US\$2.63/MMBtu	US\$3.35/MMBtu	US\$3.86/MMBtu
Henry Hub (US)	US\$2.52/MMBtu	US\$3.09/MMBtu	US\$2.91/MMBtu
AECO (AB)	C\$2.02/GJ	C\$2.86/GJ	C\$3.17/GJ

Source: Canadian Enerdata Ltd. as of September 2016.

# Eastern Canada Natural Gas Storage Balances

(as of quarter end)

Storage Survey Week	Storage Level (Billion Cubic Feet)	Storage Level vs. Same Week the Year Before	Storage Level vs. Total Capacity
Q2 2015 – June 26, 2015	123.0	127%	44%
Q3 2015 – Sept 25, 2015	233.9	105%	84%
Q4 2015 – Dec 25, 2015	257.7	116%	92%
Q1 2016 – March 26, 2016	143.4	196%	51%
Q2 2016 – Jun 24, 2016	181.3	147%	65%
Q3 2016 – Sept 23, 2016	257.8	110%	92%

Source: Canadian Enerdata Ltd.

In Eastern Canada, natural gas is stored primarily at Dawn, ON with a small amount of storage in New Brunswick. The New Brunswick storage does not service the Ontario natural gas market.

Natural gas storage levels in Eastern Canada increased from Q1-Q3 2016 and storage levels for Q3 are 10% higher than for the same time period as last year.

According to seasonal patterns, storage levels normally peak in late October or early November as withdrawals for natural gas heating begin to outpace storage injections. Prices are also more likely to see a cyclical rise during the winter heating season. Utilities buy a certain amount of natural gas during the summer months when the price is cheaper. The supply is stored, and then delivered to customers during the colder months.