

ONTARIO ENERGY REPORT Q4 2017

OCTOBER – DECEMBER 2017
OIL AND NATURAL GAS

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

Regular Gasoline	\$1.19
Diesel	\$1.14

Source: Ministry of Energy Fuel Prices

Natural Gas Prices with Transportation Costs (¢/m³)

Union Gas	17.19¢
Enbridge	15.77¢
NRG	17.77¢

Source: OEB Natural Gas Rates effective October 1, 2017

Average Natural Gas Spot Price (\$/GJ)

Dawn (ON)	\$3.53
Henry Hub (US)	\$3.49
AECO (AB)	\$1.65

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

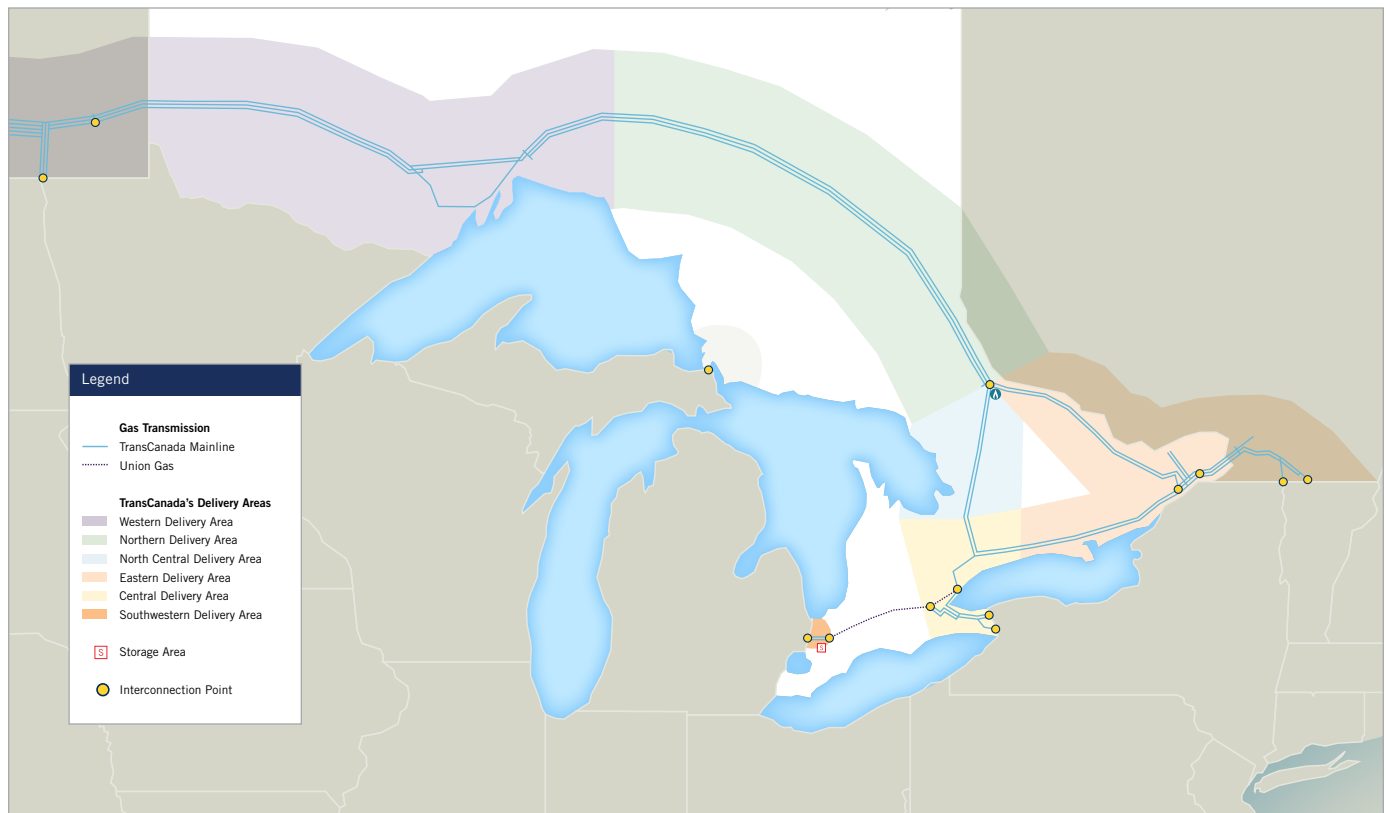
Eastern Canada Natural Gas Storage Balance (at quarter end)

232.2 Bcf

(for week ending December 22, 2017)

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

Q4 Ontario Average Regular Gasoline Retail Price (\$/L)

Year (Q4)	Ontario Average	Southern Ontario Average	Northern Ontario Average	Toronto Average	Ottawa	Sudbury	Thunder Bay
2008	0.86	0.85	0.95	1.27	0.83	0.92	1.00
2009	0.96	0.95	0.99	0.95	0.93	0.96	0.99
2010	1.08	1.08	1.11	1.02	1.09	1.08	1.13
2011	1.21	1.21	1.27	1.28	1.20	1.26	1.26
2012	1.23	1.22	1.31	1.28	1.21	1.29	1.33
2013	1.26	1.25	1.32	1.30	1.24	1.32	1.31
2014	1.12	1.11	1.20	1.32	1.07	1.17	1.24
2015	1.00	0.99	1.08	1.01	0.96	1.04	1.15
2016	1.03	1.02	1.06	1.04	1.01	1.07	1.07
2017	1.19	1.18	1.22	1.19	1.18	1.19	1.26

Source: Ministry of Energy Fuel Prices. All prices in Current Dollars per litre. Provincial, Southern and Northern Ontario averages are weighted by population. <https://www.ontario.ca/data/fuels-price-survey-information>

Toronto¹ regular unleaded gasoline retail prices in Q4 2017 were 15.9 cents per litre (¢/L) higher than in Q4 2016. This was the result of higher refining margins (+7.6 ¢/L), higher crude oil costs (+3.5 ¢/L), higher retail margins (+3.0 ¢/L) plus applicable taxes (+1.8 ¢/L). Crude oil costs would have risen by 2.1 ¢/L more than they did, had it not been for a 5% increase in the value of the Canadian dollar relative to the U.S. dollar from Q4 2016 to Q4 2017. 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

Q4 Ontario Average Diesel Retail Prices (\$/L)

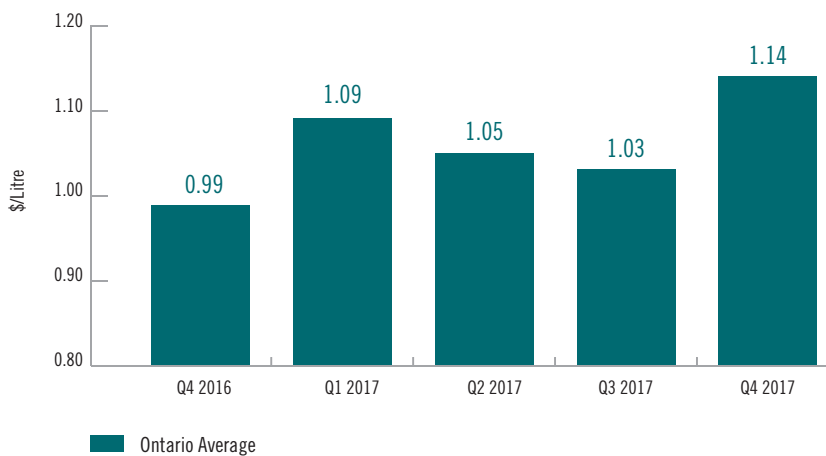
Year (Q4)	Ontario Average	Southern Ontario Average	Northern Ontario Average	Toronto Average	Ottawa	Sudbury	Thunder Bay
2008	1.03	1.03	1.10	1.03	1.04	1.08	1.13
2009	0.93	0.92	0.95	0.92	0.93	0.95	0.96
2010	1.07	1.07	1.09	1.07	1.07	1.09	1.08
2011	1.27	1.27	1.30	1.27	1.29	1.29	1.33
2012	1.24	1.23	1.27	1.23	1.25	1.25	1.31
2013	1.30	1.29	1.34	1.29	1.31	1.33	1.38
2014	1.22	1.21	1.25	1.21	1.22	1.22	1.32
2015	1.02	1.01	1.05	1.02	1.01	1.03	1.10
2016	0.99	0.98	1.01	0.99	0.98	0.98	1.07
2017	1.14	1.14	1.19	1.14	1.14	1.15	1.26

Source: Ministry of Energy Fuel Prices. All prices in Current Dollars per litre. Provincial, Southern and Northern Ontario averages are weighted by population. <https://www.ontario.ca/data/fuels-price-survey-information>

Toronto² retail diesel prices in Q4 2017 were 15.2 ¢/L higher than in Q4 2016. This was the result of higher refining margins (+11.2 ¢/L), higher crude oil costs (+3.5 ¢/L) plus applicable taxes (+1.7 ¢/L), which more than offset lower retail margins (-1.2 ¢/L). Crude oil costs would have risen by 2.1 ¢/L more than they did, had it not been for a 5% increase in the value of the Canadian dollar relative to the U.S. dollar from Q4 2016 to Q4 2017. 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 Price with Transportation Cost for Enbridge, Union Gas, and EPCOR³

Q4 ¢/m ³	2013	2014	2015	2016	2017
Union Gas ⁴	16.23	22.47	14.59	15.10	17.19
Enbridge ⁵	16.10	22.58	19.57	16.32	15.77
EPCOR (formerly NRG) ⁶	18.66	26.23	20.01	16.69	17.77

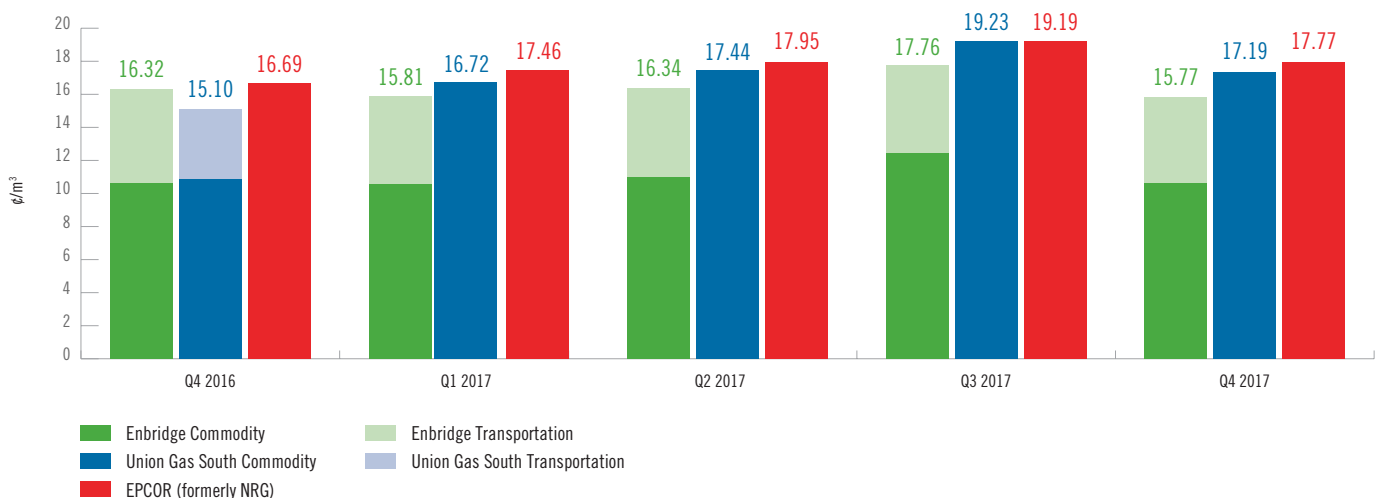
Source: OEB Natural Gas Rates effective October 1, 2017

The rate adjustment that took place effective October 1, 2017, 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 through the Quarterly Rate Adjustment Mechanism (QRAM), which captures any differences between forecast and actual commodity costs. Natural gas customers across Ontario saw modest decreases on their bills from Q3 to Q4 2017.

Following approval from the OEB, effective January 1, 2017, Union Gas introduced a change in rate zones to better reflect the mix of natural gas supply markets and transportation to serve their franchise areas. Union's five previous rate zones have been reduced to three, with the existing Southern Rate zone remaining unchanged, and the four Northern rate zones being merged into two zones, North-Western and North-Eastern. In conjunction with this change, the OEB approved price for the Southern Rate zone now combines commodity and transportation costs into one gas supply charge going forward. The Northern Rate zones will continue to post commodity and transportation costs as separate charges.

Enbridge will continue to present effective prices of the commodity, while EPCOR's pricing continues to include commodity, storage and transportation charges. For consistency of reporting, transportation costs have been included in this section for all three utilities starting in Q1 2017.

Natural Gas Price and Transportation by Quarter (¢/m³)



3. 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

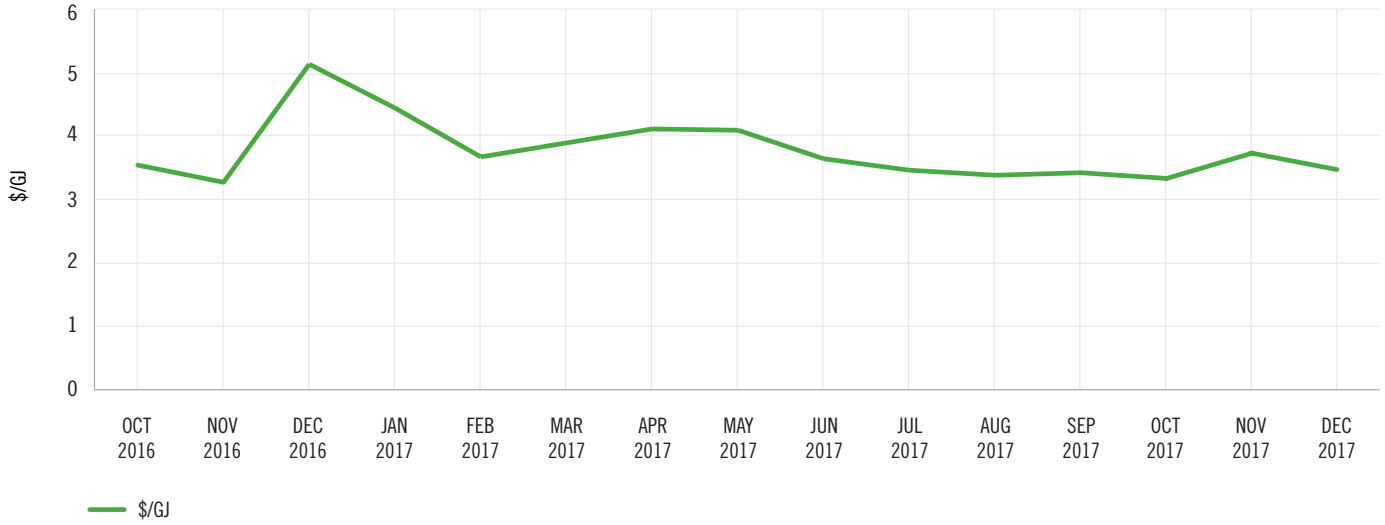
4. Union Gas' rate class is residential Southern Rate Zone (M1).

5. Enbridge's rate class is residential Rate Number 1. This table includes OEB-approved transportation costs for all LDCs.

6. The rate for EPCOR also includes storage charges. On August 3, 2017, the OEB released its decision approving the application by Natural Resource Gas Limited (NRG) to transfer its natural gas distribution system assets and OEB regulatory approvals to EPCOR. On November 1, 2017, the transaction was completed.

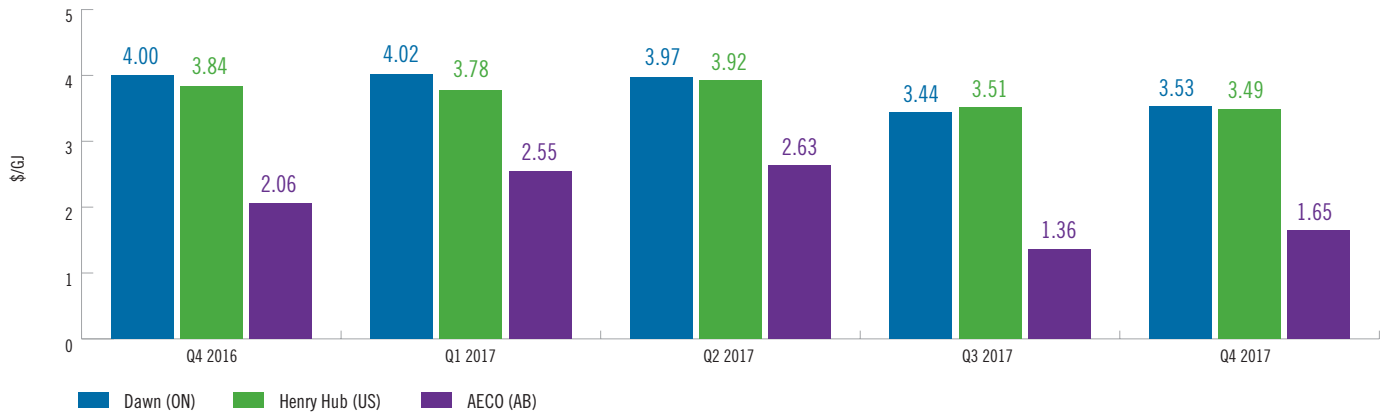
Average Natural Gas Spot Prices

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	Q4 2016	Q1 2017	Q2 2017	Q3 2017	Q4 2017
Dawn (ON)	4.00	4.02	3.97	3.44	3.53
Henry Hub (US)	3.84	3.78	3.92	3.51	3.49
AECO (AB)	2.06	2.55	2.63	1.36	1.65

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

Natural gas prices at the Dawn hub have decreased by roughly 12% from Q4 2016.

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

Trading Hub	2016	2017
Dawn (ON)	3.21	3.74
Henry Hub (US)	3.16	3.67
AECO (AB)	2.06	2.05

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

Natural gas price forecasts for select trading hubs, 2018–2019 (\$/GJ)

Trading Hub	2018	2019
Dawn (ON)	3.43	3.93
Henry Hub (US)	3.25	3.59
AECO (AB)	1.82	2.15

Source: Canadian Enerdata Ltd. as of January 3, 2018

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
Q4 2016 – Dec 23, 2016	231.8	90.0%	82.2%
Q1 2017 – March 24, 2017	110.4	77.0%	39.2%
Q2 2017 – June 23, 2017	149.0	82.2%	52.9%
Q3 2017 – Sept 22, 2017	246.5	95.6%	87.5%
Q4 2017 – Dec 22, 2017	232.2	100.2%	82.4%

Note: Maximum Storage Capacity for Eastern Canada was raised from 279.0 bcf to 281.8 bcf starting in October 2016.

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.

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.