

ONTARIO ENERGY QUARTERLY Q4 2019

OCTOBER – DECEMBER 2019
OIL AND NATURAL GAS

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

Regular Gasoline	\$1.17
Diesel	\$1.24

Source: Ministry of Energy, Northern Development and Mines (ENDM) Fuel Prices.

Average Natural Gas Spot Price (\$/GJ)

Dawn (ON)	\$2.80
Henry Hub (US)	\$2.99
AECO (AB)	\$2.33

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

Natural Gas Prices with Storage and Transportation Costs (¢/m³)

Enbridge Gas Inc.	Union Gas (Union) South Zone	14.07¢
	Enbridge Gas Distribution (EGD) Zone	15.86¢
EPCOR		14.90¢

Source: OEB Natural Gas Rates effective October 1, 2019.

Ontario Natural Gas Storage Level

(at quarter end)

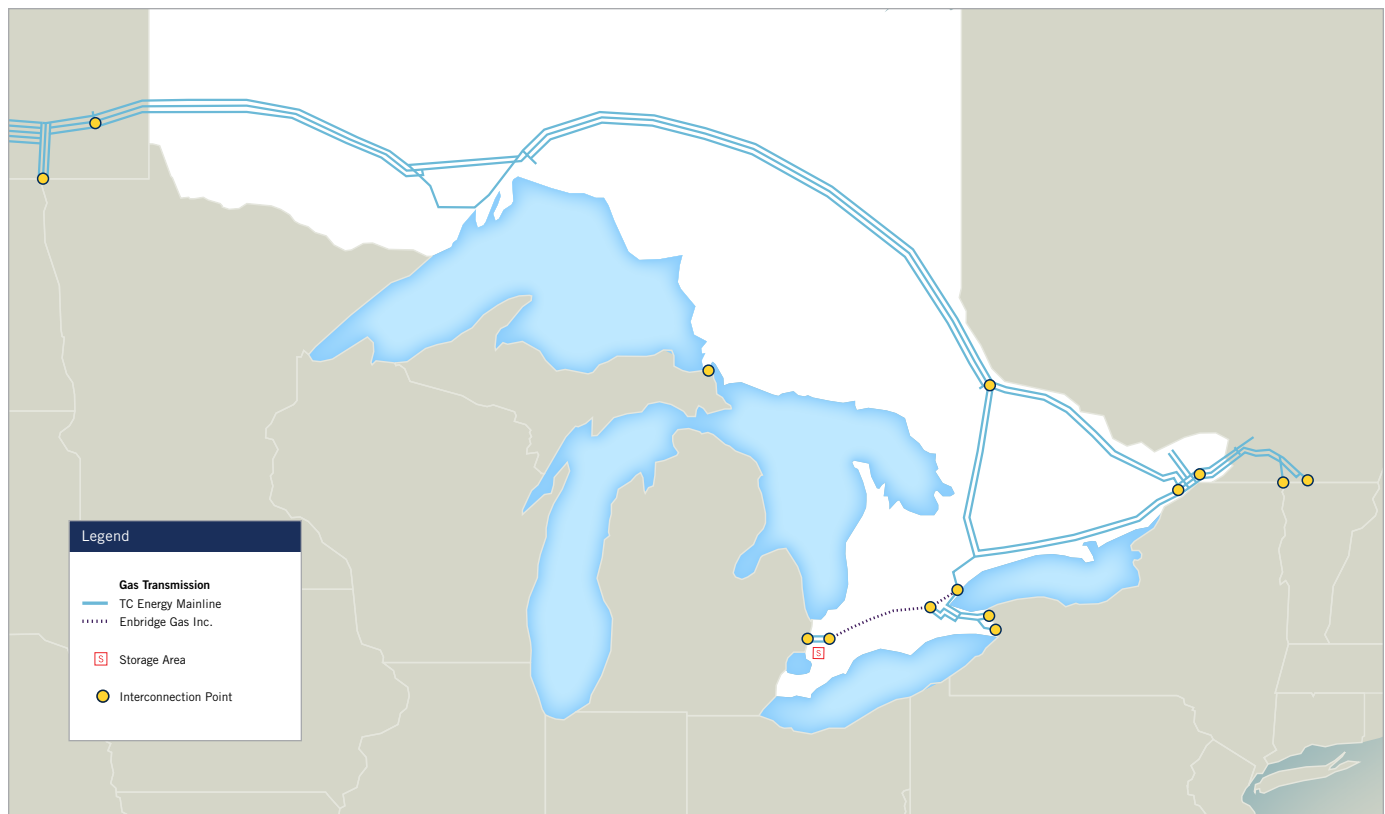
304.6 PJ

(closing inventories, December 2019)

Source: Statistics Canada.

In Ontario, natural gas is stored primarily at Dawn hub near Sarnia.

Natural Gas Transmission Infrastructure



Regular Gasoline Retail Prices

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

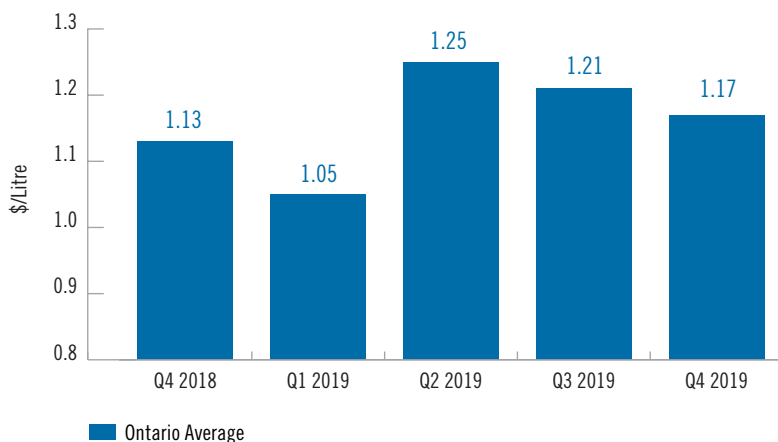
Year (Q4)	Ontario Average	Southern Ontario Average	Northern Ontario Average	Toronto Average	Ottawa	Sudbury	Thunder Bay
2010	1.08	1.08	1.11	1.02	1.09	1.08	1.13
2011	1.21	1.21	1.27	1.28	1.20	1.26	1.26
2012	1.23	1.22	1.31	1.28	1.21	1.29	1.33
2013	1.26	1.25	1.32	1.30	1.24	1.32	1.31
2014	1.12	1.11	1.20	1.32	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
2018	1.13	1.12	1.23	1.14	1.07	1.18	1.34
2019	1.17	1.16	1.23	1.17	1.14	1.19	1.29

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

Toronto¹ regular unleaded gasoline retail prices in Q4 2019 were 3.1 cents per litre (¢/L) higher than in Q4 2018. This was the result of higher crude oil costs (+11.5 ¢/L), offset in part by lower wholesale margins (-9.1 ¢/L) and lower retail margins (-4.1 ¢/L), plus applicable taxes (+4.7 ¢/L, or 4.4 ¢/L federal carbon tax² plus 0.3 ¢/L HST). Crude oil costs were only marginally affected by the 0.05% increase in the value of the Canadian dollar relative to the U.S. dollar from Q4 2018 to Q4 2019. 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.

² The federal carbon tax on gasoline came into effect on April 1, 2019.

Retail Diesel Prices

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

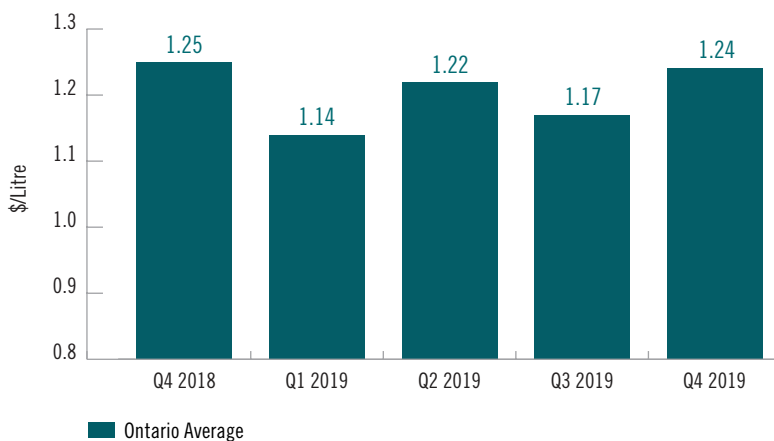
Year (Q4)	Ontario Average	Southern Ontario Average	Northern Ontario Average	Toronto Average	Ottawa	Sudbury	Thunder Bay
2010	1.07	1.07	1.09	1.07	1.07	1.09	1.08
2011	1.27	1.27	1.30	1.27	1.29	1.29	1.33
2012	1.24	1.23	1.27	1.23	1.25	1.25	1.31
2013	1.30	1.29	1.34	1.29	1.31	1.33	1.38
2014	1.22	1.21	1.25	1.21	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
2018	1.25	1.24	1.30	1.24	1.25	1.24	1.36
2019	1.24	1.24	1.29	1.24	1.25	1.25	1.38

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

Toronto³ retail diesel prices in Q4 2019 were 0.5 ¢/L higher than in Q4 2018. This was the result of higher crude oil costs (+11.5 ¢/L), offset in part by lower wholesale margins (-15.3 ¢/L) and lower retail margins (-1.2 ¢/L), plus applicable taxes (+5.5 ¢/L, or 5.4 ¢/L federal carbon tax⁴ plus 0.1 ¢/L HST). Crude oil costs were only marginally affected by the 0.05% increase in the value of the Canadian dollar relative to the U.S. dollar from Q4 2018 to Q4 2019. 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



³ Toronto was selected for the pump price analysis because it is the largest diesel market in Ontario.

⁴ The federal carbon tax on diesel came into effect on April 1, 2019.

Natural Gas Prices with Storage and Transportation Costs for Enbridge Gas Inc., and EPCOR

Q4 ¢/m ³		2015	2016	2017	2018	2019
Enbridge Gas Inc.	Union South Zone ⁵	15.33	15.80	17.90	15.88	14.07
	EGD Zone ⁶	21.67	18.42	17.87	17.43	15.86
EPCOR ⁷		20.01	16.69	17.77	16.05	14.90

Source: OEB Natural Gas Rates effective October 1, 2019.

Each quarter, natural gas utilities adjust their gas supply charges based on a forecast of natural gas market prices over the next 12 months. Some components of these rates, such as the transportation charge, may change at the same time. Other components follow a different timeline, like delivery rates, which generally change once a year. Additionally, the “gas supply cost adjustment” is updated through the Ontario Energy Board’s (OEB’s) Quarterly Rate Adjustment Mechanism (QRAM),⁸ which captures any differences between forecast and actual commodity costs.

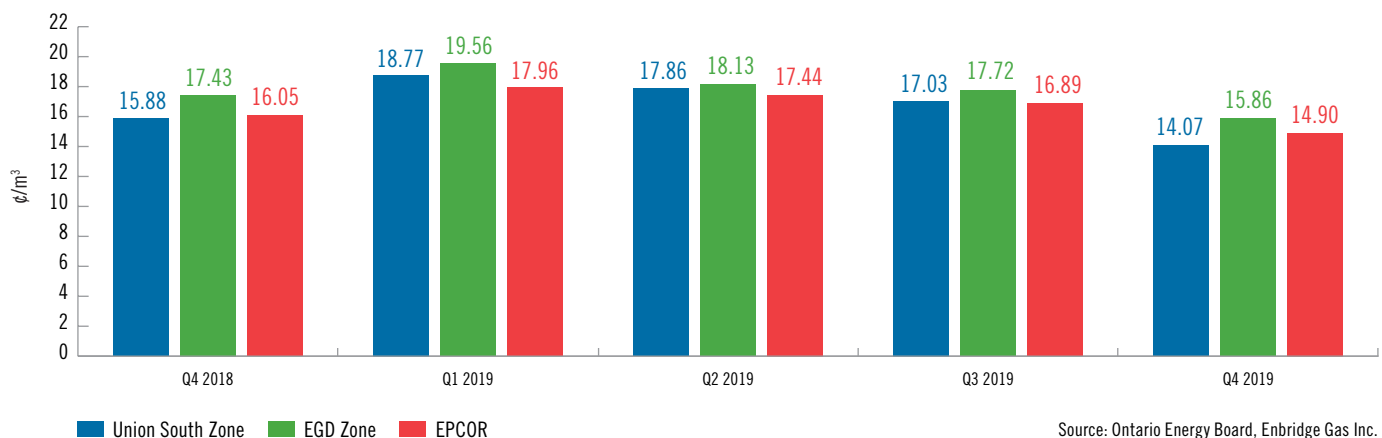
Following approval from the OEB, effective January 1, 2017, the price for the Union South Rate zone combined commodity and transportation costs into one gas supply charge going forward. For consistency of reporting, storage and transportation costs have been included in this section for all rate zones.⁹

Effective October 1, 2018, the OEB removed provincial cap-and-trade costs in conjunction with the QRAM for Q4 2018. The removal of cap-and-trade costs resulted in a reduction of about 3.3 ¢/m³ from the delivery charge component of natural gas bills.

Effective January 1, 2019, Enbridge Gas Distribution (EGD) and Union Gas (Union) amalgamated to become Enbridge Gas Inc., however EGD and Union will continue to operate as distinct rate zones for the immediate term.

On April 1, 2019, the federal carbon tax came into effect at a rate of 3.91 ¢/m³ for natural gas. Effective August 1, 2019, the OEB approved the collection of the federal carbon tax through a new line item on natural gas bills. The federal carbon tax was therefore absent from Ontario natural gas bills during Q2 2019.

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



⁵ Union's rate class is residential Southern Rate Zone (M1).

⁶ EGD's rate class is residential Rate Number 1.

⁷ 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.

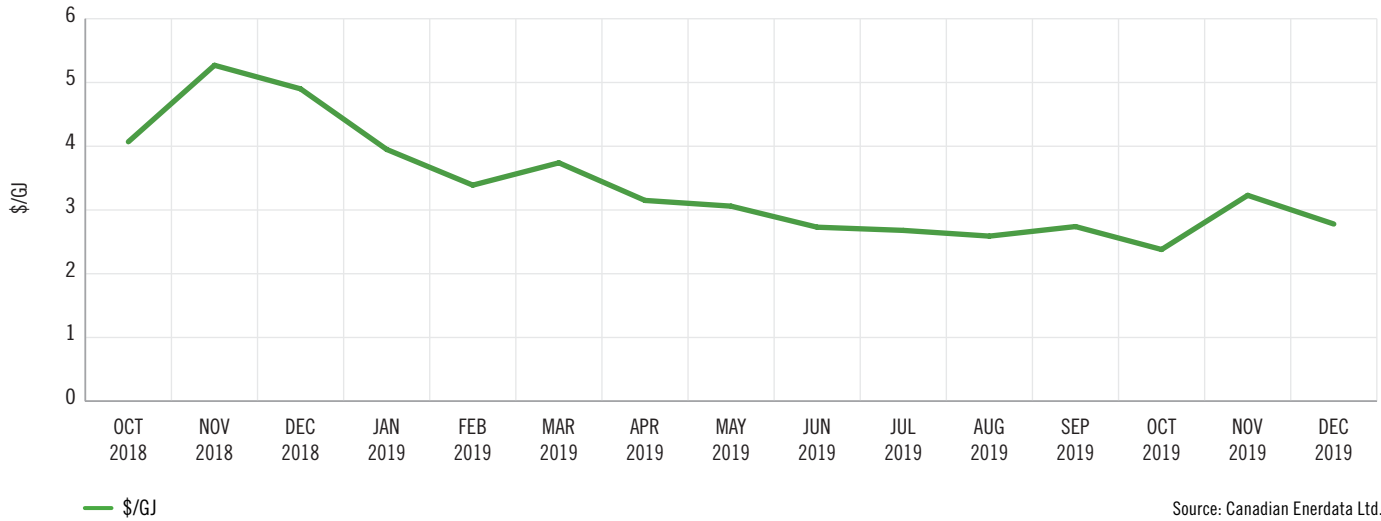
On November 1, 2017, the transaction was completed.

⁸ For more information on the OEB's QRAM prices please see: www.ontarioenergyboard.ca/OEB/Consumers/Natural+Gas/Natural+Gas+Rates

⁹ EGD pricing includes an estimated storage component.

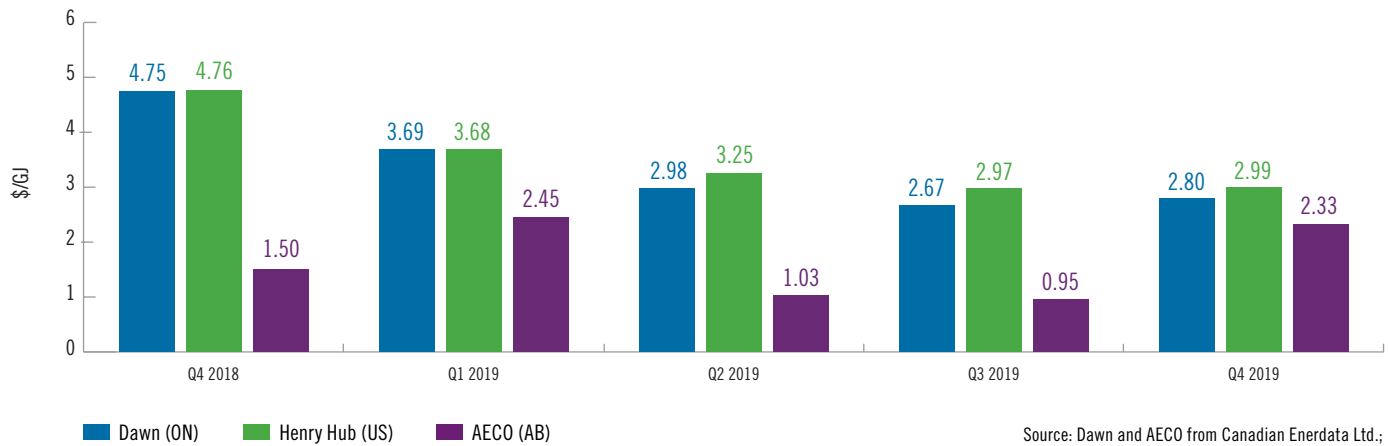
Average Natural Gas Spot Prices

Monthly Average Natural Gas Spot Prices at Dawn, ON (\$/GJ)



Note: Prices between January 2019 and September 2019 are based upon daily closing spot prices. Prices prior to January 2019, and after September 2019, are based upon daily traded averages.

Quarterly Average Natural Gas Spot Prices at Select Trading Hubs (\$/GJ)



Note: Prices for Henry Hub, and prices for Dawn and AECO between January 2019 and September 2019 are based upon daily closing spot prices. Prices prior to January 2019, and after September 2019, Dawn and AECO are based upon daily traded averages.

Quarterly Average Natural Gas Spot Prices at Select Trading Hubs (\$/GJ)

Trading Hub	Q4 2018	Q1 2019	Q2 2019	Q3 2019	Q4 2019
Dawn (ON)	4.75	3.69	2.98	2.67	2.80
Henry Hub (US)	4.76	3.68	3.25	2.97	2.99
AECO (AB)	1.50	2.45	1.03	0.95	2.33

Note: Prices for Henry Hub, and prices for Dawn and AECO between January 2019 and September 2019 are based upon daily closing spot prices. Prices prior to January 2019, and after September 2019, Dawn and AECO are based upon daily traded averages.

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

Annual Average Natural Gas Spot Prices at Select Trading Hubs (\$/GJ)

Trading Hub	2018	2019 (YTD)
Dawn (ON)	3.62	3.03
Henry Hub (US)	3.68	3.22
AECO (AB)	1.95	1.69

Note: Prices for Henry Hub, and prices for Dawn and AECO between January 2019 and September 2019 are based upon daily closing spot prices. Prices prior to January 2019, and after September 2019, Dawn and AECO are based upon daily traded averages.

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

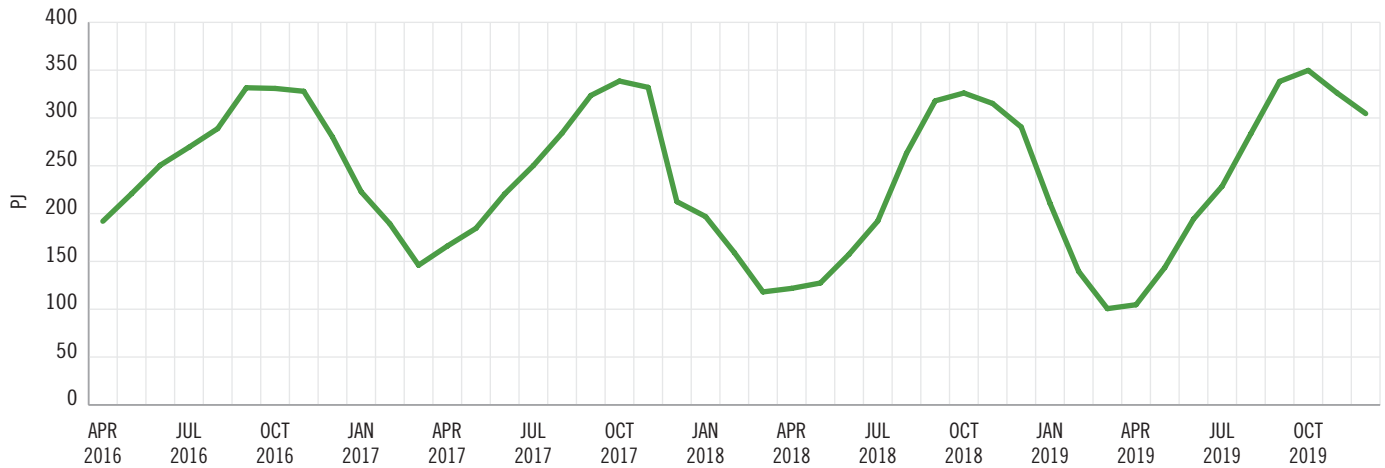
Natural Gas Price Forecasts for Select Trading Hubs, 2020-2021 (\$/GJ)

Trading Hub	2020	2021
Dawn (ON)	1.78	2.03
Henry Hub (US)	2.93	3.46
AECO (AB)	2.74	3.31

Source: Canadian Enerdata Ltd.

Ontario Natural Gas Storage Balances

(as of quarter end)



Source: Statistics Canada.

Note: Previous editions of this table featured total Eastern Canadian storage levels in billion cubic feet (bcf) and million cubic meters (mcm).

In Ontario, natural gas is stored primarily at Dawn, ON.

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.