

NATURAL GAS HEATING SEASON REPORT 2023-2024

FALL 2023

INTRODUCTION

Canada's natural gas system offers affordable, reliable, and clean energy. This report looks at the main indicators for Canada's natural gas market as we enter the 2023-2024 winter heating season. A summary of these key indicators help readers understand where market fundamentals sit as the colder months approach, furnaces are turned back on, and demand for natural gas peaks.

EXECUTIVE SUMMARY

After a couple years of a pandemic and an energy crisis last year, 2023 provides some amount of regularity in the Canadian gas market. Natural gas consumption remains high in 2023, continuing a trend that was started in the second half of 2022. In addition, more than 81,000 new customers joined Canada's natural gas system in 2022 to take advantage of this affordable, reliable, clean energy choice – particularly as a winter heating option.

Natural gas production has been strong, reaching record levels earlier in the year before seeing a slight curtailment due to wildfires. Due to the high production levels, gas storage levels were able to recover quickly after ending 2022 with lower-than-expected inventories. Storage levels are approaching five-year highs which, combined with the high production rates, will provide some assurance for supply in the event of colder than expected weather.

At a national level, prices for natural gas are averaging \$2.85/GJ going into the heating season, down nearly 45% at the same time last year. The decrease in pricing further cements natural gas' position in Canada as the most affordability fuel source both globally and domestically. For Canadian consumers, it remains the most affordable home heating option when compared with electricity, fuel oil, and propane.

Weather is a key factor affecting (particularly winter) prices for natural gas, as colder weather drives up demand, which can then drive-up price. Current probabilistic outlooks from Environment and Climate Change Canada show “warmer than normal” temperatures as being more likely for most of the country this winter which, if it is the case, will mean lower natural gas use, lessening the pressure for prices to rise higher.

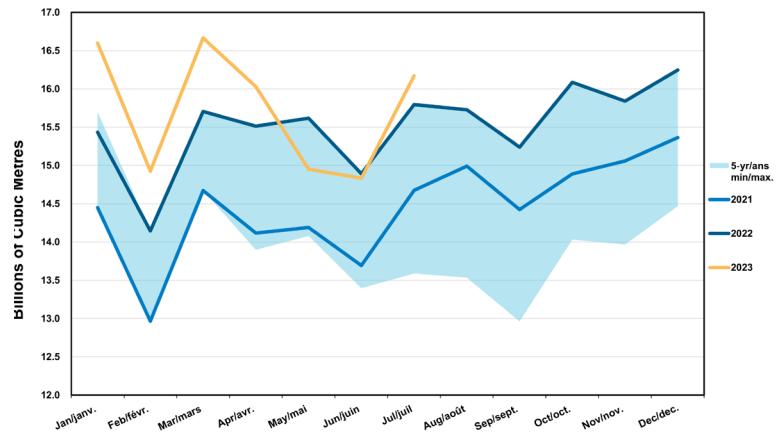
NATURAL GAS PRODUCTION

Canada's natural gas production continues to achieve record levels.

After reaching record high levels of production in 2022, the trend has also largely continued in 2023. Within the first quarter of 2023, two single month production records were broken – first in January and then again in March. Production levels dipped in April to June, largely due to wildfires resulting in some production shut-in. Despite this, second quarter production levels still trended relatively high relative to the previous five-year average.

Furthermore, some of that production loss has started to recover in July, once again exceeding the five-year high. Due to high production levels, supply is abundant going into the 2023-2024

NATURAL GAS PRODUCTION



SOURCE: STATISTICS CANADA TABLE: 25-10-0055-01

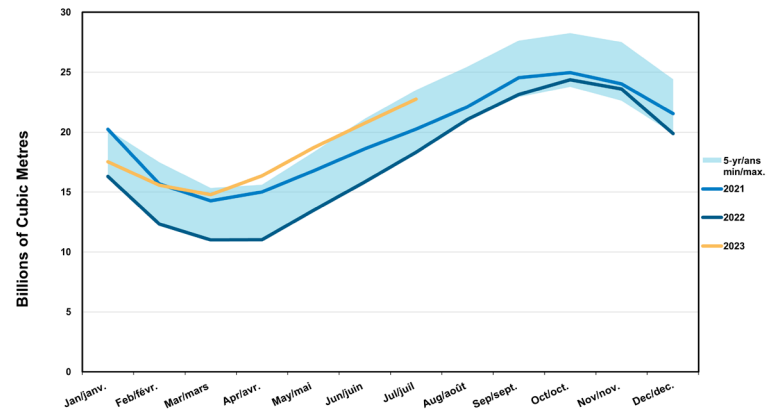
NATURAL GAS STORAGE

Natural gas storage levels are high heading into the heating season.

Since the end of July 2023, natural gas inventories are relatively high compared to the five-year range. The rate of inventory build throughout the year has been remarkable considering that inventories started at much lower level at the end of 2022.

Much of the quick rebuild of inventories has been a result of higher supply and lower demand. As previously discussed, warmer than typical temperatures throughout this winter have resulted in much lower withdrawals from storage in January and February. In addition, higher production rates since the start of this year have helped to rebuild inventories relatively quickly throughout the spring and summer. If production rates remain as high as they are now, inventories are also expected to remain at typical storage

NATURAL GAS STORAGE



SOURCE: STATISTICS CANADA TABLE: 25-10-0057-01

levels heading into the winter. Ultimately, higher inventories put some downward pressure on prices as it provides additional supply buffer in case of a cold winter or other adverse events.

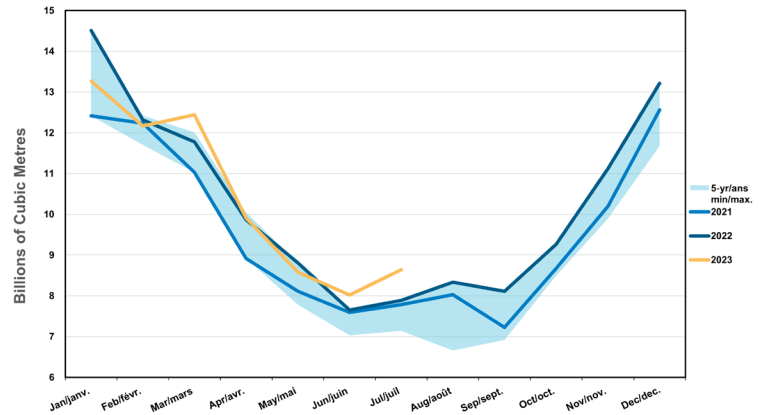
NATURAL GAS DEMAND

Gas demand remains high into 2023 while residential customers continue to join the natural gas system.

In a trend that started in the second half of 2022, natural gas consumption has remained at high levels since the start of 2023. This is despite a milder winter season across most of the country resulting in lower overall gas use for heating buildings in January and February compared to prior years. While natural gas demand is often seasonal, consumption of gas in the industrial sector has remained relatively constant between January and July of this year. Furthermore, gas demand has exceeded the five-year highs in three months so far this year: March, June, and July.

More than 81,000 new residential customers joined the natural gas system this past year, in

NATURAL GAS SALES



SOURCE: STATISTICS CANADA TABLE: 25-10-0055-01

preparation for the 2023-2024 winter heating season. This brings the total active natural gas customer base of Canada's gas utility companies to nearly 7.6 million end-use locations.

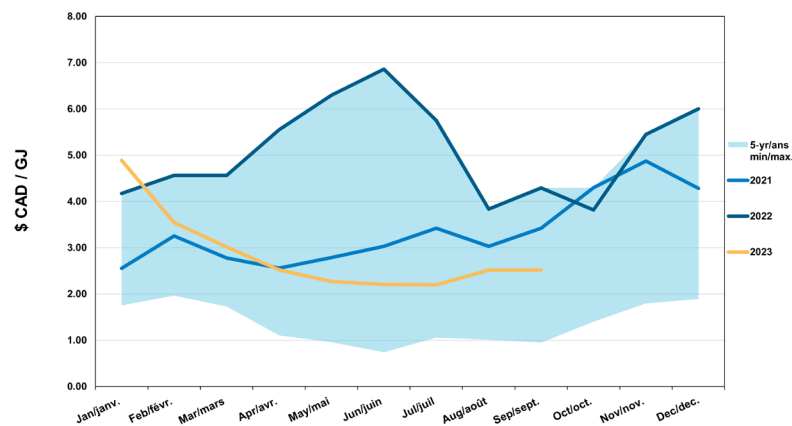
NATURAL GAS PRICES

Natural gas prices fall, cementing its position as Canada's most affordable energy.

After a year that saw an energy crisis that brought about high price volatility and supply disruptions, natural gas prices have returned to pre-crisis levels in 2023. Natural gas prices were averaging \$2.85/GJ through September this year, down from an average of \$5.10 during the same period last year. Prices reached their lowest year-to-date in July at \$2.20/GJ. Since then, prices have increased slightly to \$2.52 in September, reflecting some seasonal demand changes as we head into the winter heating season.

In the international context, Canadian prices remain among the lowest in the world. While global prices have also come back inline to 2021 levels, Canadian gas still holds a significant cost advantage. As of September 2023, the spot

NATURAL GAS PRICE - AB MARKET PRICE



SOURCE: NGX

prices in Europe and Asia were more around six times higher than the price of gas in Alberta.

The reason for this is that North America has a series of significant advantages that

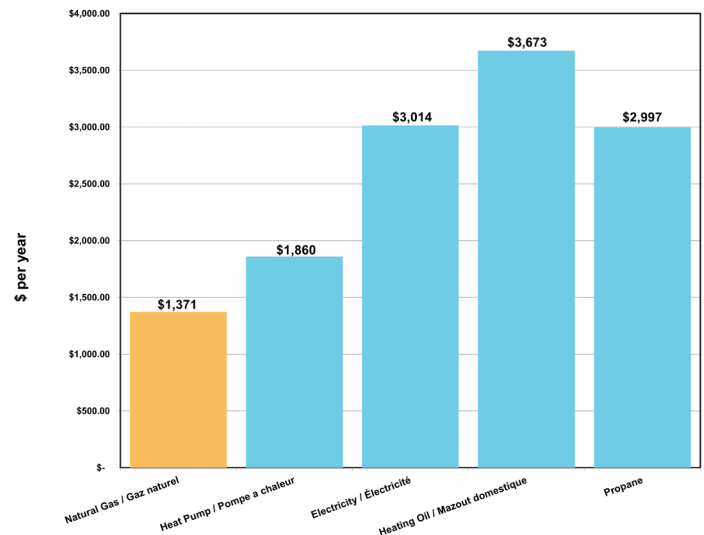
Heating Season Report 2023-2024

keep natural gas the most affordable energy option, which includes abundant local supply, significant storage, and robust and integrated markets. This is particularly true in Canada, where limited exporting capacity keeps prices more insulated from the volatility seen in other markets. Even when compared to the US Gulf Coast, prices in Alberta have been on average \$0.62 USD/mmBtu cheaper in 2023.

Even after accounting for the recent increase in prices, natural gas continues to be the most affordable energy option in Canada. Compared to the other major heating fuels, natural gas customers can save as much as \$2,300 per year on their energy bills. A residential heating bill using natural gas would cost less than \$2,000 per year, which remains by a large margin the most affordable heating option.

The affordability advantage of gas will only be compounded as innovation continues to develop new technology options like natural gas-powered heat pumps and combined heat and power systems. While natural gas customers

RESIDENTIAL SPACE & WATER HEATING COST 2022



SOURCE: STATSCAN, KALIBRATE, CER

are seeing the burden of more and more carbon tax and related regulatory costs on their bills, the fundamental value proposition of Canada's most affordable and reliable energy choice remains strong.

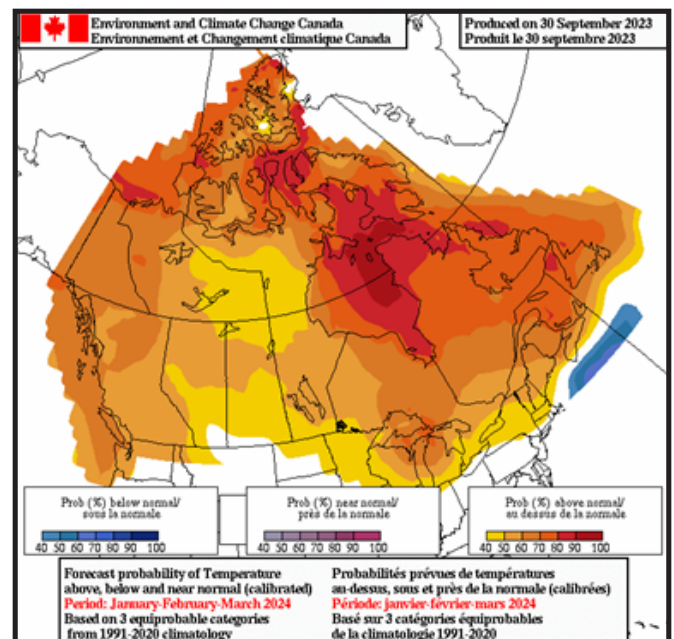
WINTER WEATHER

Forecast shows “warmer than normal” winter likely for most of the country.

Environment and Climate Change Canada's outlook, as of September 2023, predicts a high probability for “above normal” temperatures this coming winter heating season (October to March) for most of the country.

Generally speaking, colder and snowier winter weather would lead to more energy use by homes and businesses.

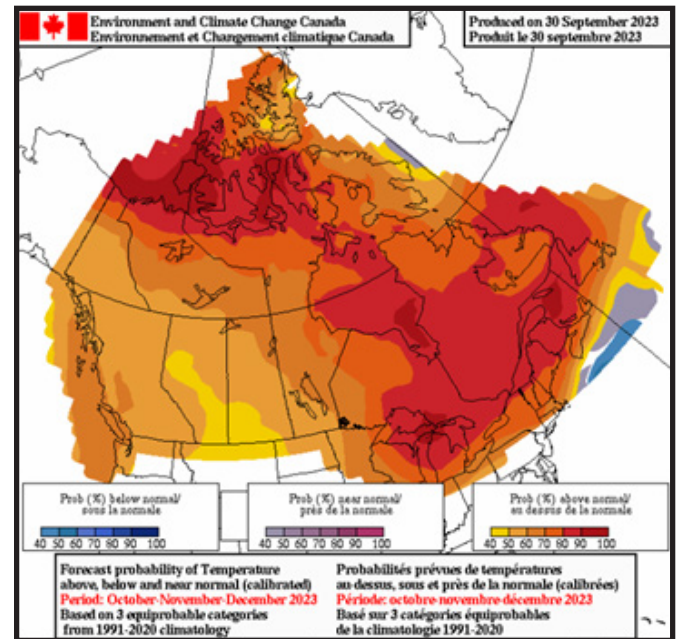
The implication of warmer weather is that supply and pricing are less likely to face upward pressures despite lower than typical inventories coming into this winter season.



SUMMARY

After seeing the effects of a global pandemic in 2020 to 2021 and then an energy crisis in 2022, we may finally be seeing some sense of normalcy in the Canadian gas market.

Natural gas production rates are currently at record levels, keeping pace with demand while also keeping storage levels high as we head into the winter season. Combined with the current prediction of “above normal temperatures”, means that we are well supplied and will help to put some downward pressure on prices. Ultimately, Canada remains in a strong position heading into the 2023-2024 winter heating season.



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