Natural gas market update & Canadian investment opportunities

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This note is best read in conjunction with our last update on the natural gas market in October of 2021.

Summary

In today's note, we discuss the current dynamics in the natural gas market, including:

- Key events since our last update
- Where we are now
- What's next
- How we are positioned

Key events since our last update

The key event since our last update is the heart-breaking invasion of Ukraine by Putin on February 24, 2022. The West took quick action and imposed various sanctions on Russia. However, given that Russia accounts for approximately 40% of Europe's natural gas consumption, the majority of which flows through pipelines in Ukraine, these sanctions broadly excluded the export of energy commodities. Not surprisingly, Putin reacted to these sanctions by ultimately weaponizing energy, i.e., disrupting the flow of natural gas.

The initial impact on natural gas prices was volatile. However, prices began to stabilize as the market ascribed a low probability to a flow disruption. We, however, remained concerned about the potential risk of supply disruptions and maintained or increased our natural gas exposure to take advantage of an expected higher commodity price environment. Two such examples will be discussed later.

What drove our concern?

As discussed in our October 2021 note, natural gas is exported via tankers in the form of LNG (Liquefied Natural Gas) or through pipelines. Pipelines are clearly defined and gas cannot easily be rerouted to other pipes unless spare capacity exists. The same is true for LNG terminals. Natural gas is liquefied at the export terminal and needs to be regasified at the import terminal. Similar to pipelines, infrastructure must be in place and spare capacity must be available to reroute LNG.

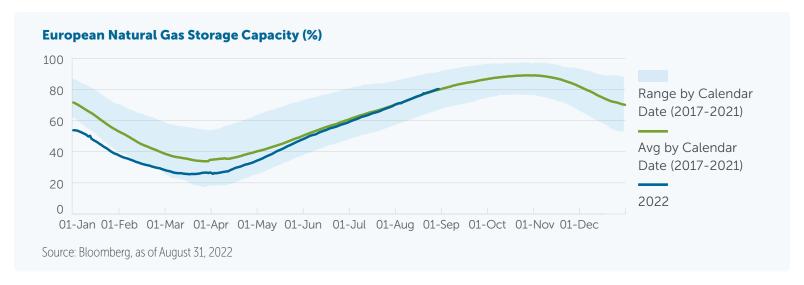
The current export and import LNG terminal capacity is insufficient to allow for significantly more natural gas flow into Europe to offset the Russian volumes. We believed that this lack of capacity significantly limited Europe's options regarding alternative sources of energy. However, Europe was sure to fully utilize its existing LNG capacity which implied that European and Asian buyers of LNG would now have to compete for the same molecules. We believed this dynamic would support and likely increase natural gas prices.

A significant event occurred in mid-June; Russia began disrupting gas flow. Gazprom – Russia's state owned natural gas company – began a series of supply cuts on its main pipeline Nord Stream 1 (NS1) to Europe. The company attributed the curbs to technical issues due to stranded Siemen turbines in Canada given Ottawa's sanctions on Russia. However, many believed that the cuts were more politically motivated rather than due to technical issues.



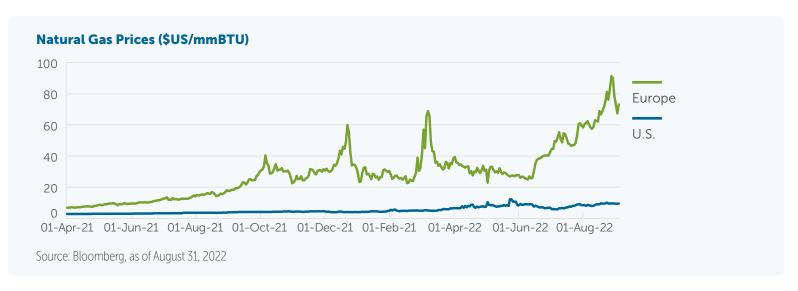
Where we are today

Today, gas flow on NS1 is down to 20% of its capacity. The risk for a power crunch has increased in not only European but also Asian nations. To ensure sufficient supply during the high demand winter months, there has been a keen focus by Europe to increase its natural gas inventories. Today the region is well ahead of schedule and close to reaching its target of 80% (of storage capacity) in September. This target was initially set to be achieved by November – a key month ahead of peak demand.



Many factors have contributed to this refill of natural gas reserves. These include a combination of efforts made by Europe such as ensuring the flow of imports into the region even if that implies higher prices and imposing rationing to various degrees on consumers and industries. Additionally, factors outside of Europe's control also supported their storage build, such as continued COVID related lockdowns in China which reduced energy demand by the country and general demand destruction driven by high power prices. To complicate matters, NS1 is expected to go off line for a three-day maintenance starting August 31, 2022, further raising questions around the amount of flow post restart.

Natural gas prices today are approximately US\$9/mmbtu in the US and about US\$70 in Europe. To give you a sense of the magnitude of today's prices, European prices equate to over US\$400/barrel of oil and well over US\$0.50/kWh of power (Canadians pay about C\$0.14/kWh).



The impact of higher power and energy prices on Europe is discussed by David Mann. The focus of this note is on the implications to Canadian securities.

What's next

It goes without saying that the natural gas situation in Europe remains very fluid with several moving parts. But we can walk through some high-level short-term and long-term scenarios.

Short-term:

The scenarios revolve around storage levels in November and whether Russian flows remain at current levels (i.e. NS1 will restart at the current 20% capacity and gas flow through other pipelines remains constant). Weather is always an important and unpredictable factor that impacts natural gas demand. But assuming a "normal" winter season, it is estimated that should inventory levels reach the 80% target, then as long as Russia continues to flow gas through its other pipelines, even with a full shutdown of NS1, inventory levels will be around the critical 20% mark by spring of 2023. Recall from our last note that the winter season is when we draw from inventories and the spring is when we inject into the inventories in preparation for the following winter season. The 20% level is the minimum comfortable level given injection estimates.

While it is very difficult to estimate Russian action and weather patterns, we believe that the margin of safety surrounding the 20% inventory level is currently too low under the above scenarios and estimate continued and likely increased level of rationing in Europe and Asia.

Medium to long-term:

The bigger concern is what happens the following winter season. We believe that the continued uncertainty surrounding flows and the likely need for continued rationing increases the risk of sufficient gas supply for winter of 2023. Natural gas prices will very likely remain volatile. While we believe that market dynamics and government interventions will reduce prices from today's extreme levels, under our current assumptions we expect natural gas prices to be supported at levels above their long-term average. As noted before however, this is a very fluid situation which we will monitor closely.

The question surrounding energy security and stability of price in the long run will no doubt form the basis of Europe's strategic decisions today. Clearly reliance on one nation for the majority of your energy needs has proven to be flawed. So, what can Europe do to diversify this exposure? Many have quoted additional LNG infrastructure as the solution. However, capital requirements for LNG facilities are high and construction timelines are long. As such, exporters require long-term (20-yr) contracts to ensure sufficient return on investment. Thus far, Europe has been reluctant to sign a significant number of contracts given its focus on zero emissions targets longer-term.

Is it good to be Canadian?

Yes – but it could have been better. We are an ally nation with an inexpensive supply of natural gas which can theoretically be exported to regions where this gas is needed. These two attributes would meet Europe's pursuit for energy security and stability. However, the absence of LNG facilities in Canada has not only been to the detriment of Europe but has also had significant opportunity costs to Canada. Leaving the political discussions surrounding this topic aside, the question for us as money managers is how we can take advantage of the current situation.

North American prices have participated in rising global prices, albeit to a much lesser degree. As an example, despite the limited LNG export facilities in the US, natural gas prices today are at or close to record highs. This is driven by several factors, but a key factor relates to global markets as domestic molecules must compete with LNG molecules which are now priced at global prices.

Here are two examples of Canadian companies, which we own across several of our funds, that we feel have allowed us to take advantage of the current market environment:

Tourmaline Oil (TOU)

As the largest natural gas producer in Canada, the company is no doubt exposed to natural gas prices. Notwithstanding the current AECO (Canadian) price situation, we have been long-term shareholders of TOU not for its commodity exposure but for its consolidation strategy in Western Canada and its strong free cash flow generation. We also like the strategic decisions made by the CEO. One such example is the export agreement with

Cheniere Energy to supply natural gas to a USGC (US Gulf Coast) LNG facility starting in January of 2023. While small in terms of volume, TOU will be receiving JKM (Japan/Korea Marker) pricing for this volume. JKM pricing refers to the Asian LNG pricing which have largely tracked European prices. This is a clear example of the forward-thinking strategy by the CEO to diversify the company's exposure outside of Canada and participate in rising global prices. Longer term the company's assets are strategically positioned to benefit from the construction of LNG Canada.

Nutrien (NTR)

Nutrien is a familiar Saskatchewan example who is also a beneficiary of high global natural gas prices. NTR is a fertilizer company, producing nitrogen and potash as its key fertilizers. Feedstock for nitrogen is either natural gas or anthracite coal. Nitrogen prices are set globally by the marginal cost of production which is either the natural gas producing European nations or coal producing Asian nations. We believe that nitrogen prices for the upcoming fall demand season will be influenced by Europe. The astronomical natural gas prices in Europe today have resulted in a shutdown of roughly 50% of Europe's ammonia (a form of nitrogen) production. NTR's operations are in Canada and the US. This is a huge advantage for the company as it essentially realizes the spread between low North American and high European natural gas prices.

While discussing NTR, I'm going to take a slight detour to discuss NTR's potash operations as well. Potash supply is dominated in Russia, Belarus and Canada. Although no direct sanctions have been imposed on Russian fertilizers, logistical challenges such as procurement of ships and insurance have reduced potash exports. Currently however, there are direct sanctions against Belarus. Russia and Belarus together are roughly 40% of global potash market. With limited tonnes leaking out of Belarus and significant disruptions to Russian exports, NTR has been able to benefit not only from higher potash prices but also its ability to increase its low-cost volumes.

To wrap up, we continue to have a strong preference for companies with a history of FCF (free cash flow)/share growth and proven ability to compound capital overtime. The above examples are not deviations from our strategy; however, today's market dynamics provide additional support to our thesis.

We thank you for your continued support.

Sara Shahram

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