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EQUITY RESEARCH

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LNG Outlook For Canadian Pipeline Companies

Energy Security Benefiting LNG

Sector:
Energy

Our Conclusion

The Ukraine/Russia conflict has rebalanced the ESG equation, placing greater emphasis on energy security with the ultimate result being increasing LNG demand, which should also create demand for upstream capacity. Although it will take some time to materialise, we foresee potential upside to our price targets of between 5%-10% through a combination of additional growth projects and potential terminal multiple expansion. Of our coverage universe, we believe Enbridge is relatively best positioned to benefit.

Key Points

Energy Security Has Lost Its Innocence: We believe that the conflict between Ukraine and Russia has created a paradigm shift in how natural gas-related energy security is viewed and, as a consequence, has increased the global LNG demand outlook, particularly in Europe. Even if sanctions against Russia were to ease, Europe securing 40% of its gas demand from Russia no longer seems tenable from an energy security point of view.

USGC To Supply The Majority Of Incremental Demand: We expect U.S. Gulf Coast (USGC) projects to supply the majority of the incremental demand required by Europe from some of the 10 permitted facilities in the USGC that have not yet reached FID. While we expect some project attrition, we expect some projects to reach FID in the next one to two years. With U.S. LNG developers signing at least 19 contracts for 24 Mtpa LNG since February 24, a super cycle that could double USGC LNG export capacity may have begun.

Enbridge Is Best Positioned: TC Energy and Enbridge have exposure to LNG development, with Enbridge having the most leverage, in our opinion, especially when also considering its potential in Canada. Benefits to the upstream gas transmission systems of both companies are also likely. Gas transmission systems are already highly utilized, and so the advancement of LNG projects could require upstream expansions beyond lateral connections to LNG terminals, adding to the potential that already exists from replacing coal-fired power with natural gas-fired power. This outlook supports the capital project outlook for both ENB and TRP, if not providing upside to our forecasts. Continued efforts to responsibly source natural gas, with a particular emphasis on decarbonizing, are potential opportunities, albeit may take some time to fully develop.

While we are not modifying our estimates at this time, we believe the demand environment for natural gas as a transition fuel has strengthened, with potential benefits to terminal multiples. Permitting and related litigation for pipeline projects serving LNG facilities remains a risk. Construction risk should also not be overlooked in this inflationary environment, and we expect healthy competition for pipeline projects.

All figures in Canadian dollars unless otherwise stated.

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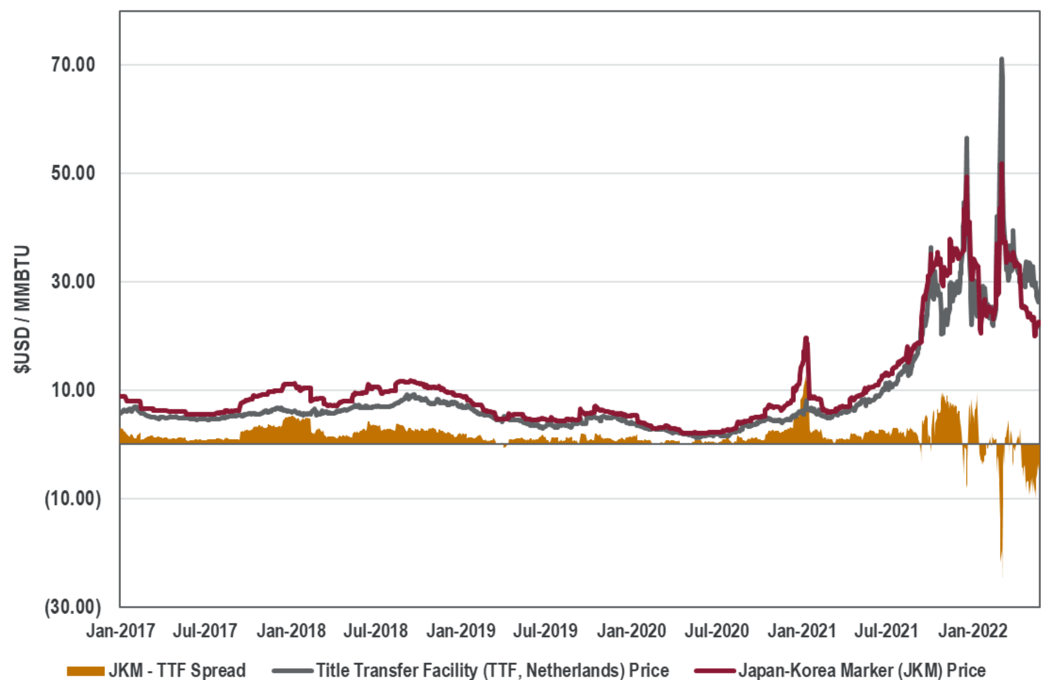
ESG Discussion More Balanced With Energy Security

A lot can change in just a couple of years. Whereas previously the ESG conversation was highly focused on emissions reduction, to the perceived detriment of natural gas as a transition fuel, today the discussion is much more balanced, with focus placed on the practical reality of energy security. The impact is a likely increase in demand for gas infrastructure, and an extended useful life of existing assets. In our opinion, investors place significant emphasis on useful life of assets when assessing terminal values. If our view on the outlook for LNG is correct, the risk to terminal multiples for pipeline companies may be reduced, and multiples could expand.

LNG Market Was Already Tight

During the depths of the pandemic, the BloombergNEF forecast suggested a global LNG supply glut lasting 10 years. This was the result of 92 Mtpa of capacity receiving final investment decisions (FIDs) between 2018-2019, many without confirmed end-users. Coupled with a pandemic-related demand shock, the market looked well supplied. Many forces conspired to tighten the LNG market, including economic growth following the lifting of pandemic-related lockdowns, an extended European winter in 2021, and drought conditions in Brazil. As a result, 2021 illustrated the fragility and interdependence of the energy system, with historically low inventories causing European gas prices to exceed Asian LNG prices and attracting cargoes into Europe to meet winter gas demand, as seen in the Exhibit 1 bar and line chart below.

Exhibit 1: Gas Prices – JKM-TTF LNG Price Spread, 2017 - 2022



Source: Bloomberg and CIBC World Markets Inc.

Reducing Reliance On Russian Gas

The conflict between Ukraine and Russia is prompting many European nations to either address the practical realities of energy security and seek alternatives to Russian gas or have seen Russia cut off their supply. According to numerous sources, Russia typically supplies about 40% of the European Union's gas demand, as shown in the Exhibit 2 bar chart below, or about 155 Bcm, most of it by pipeline, making it by far Europe's largest supplier. The Exhibit 2 bar chart is an older forecast from 2021.

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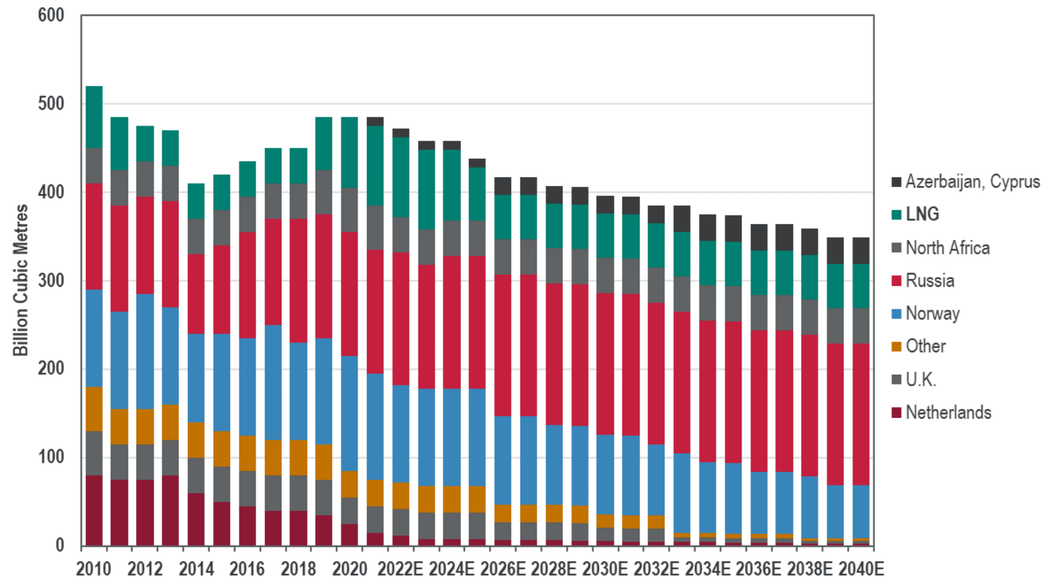
Exhibit 2: Gas Supply – 2021 European Gas Supply Forecast, 2010 - 2040E

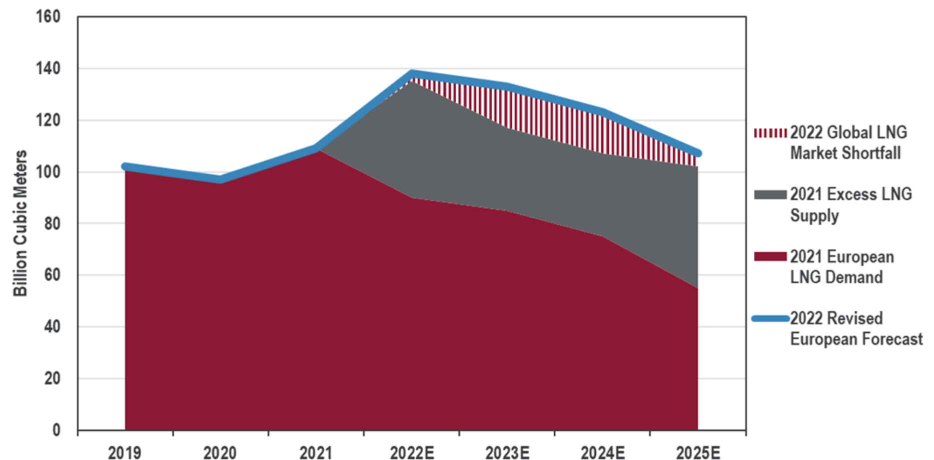


Source: BloombergNEF and CIBC World Markets Inc.
Note: Other is other EU-27 production

The Conflict And Related Sanctions Against Russia Have Created A Paradigm Shift In Contracting

Just days after the start of the conflict between Ukraine and Russia, European leaders announced plans to radically reduce Europe's reliance on Russian energy. LNG will be vital to the RePowerEU plan to reduce Russian natural gas imports by two-thirds (102 Bcm) in 2022, 50 Bcm of which is expected to come from LNG imports, according to BloombergNEF. The remainder of the gas displaced, as stated by BloombergNEF, will come from renewables, heat pumps and biomethane solutions. Previously, policy changes relating to the role of natural gas in energy transition suggested declining LNG demand and had slowed contracting. Following the start of the conflict, European buyers have resumed contracting for LNG in light of energy security issues, with contract lengths extending beyond 2030. Sourcing all the LNG needed to lower Europe's dependence on Russian supply will remain a challenge. As a result, global gas markets beyond 2022 look tight, with an undersupplied situation developing and new LNG export capacity needed, as seen in the Exhibit 3 area chart below. We also expect Asia to continue to see increased demand, especially as Japan and Korea imports combined outweigh China's imports and most of China's LNG and gas infrastructure are located in the southern region of the country, according to BloombergNEF.

Exhibit 3: LNG – 2022 European LNG Outlook, 2019 - 2025E

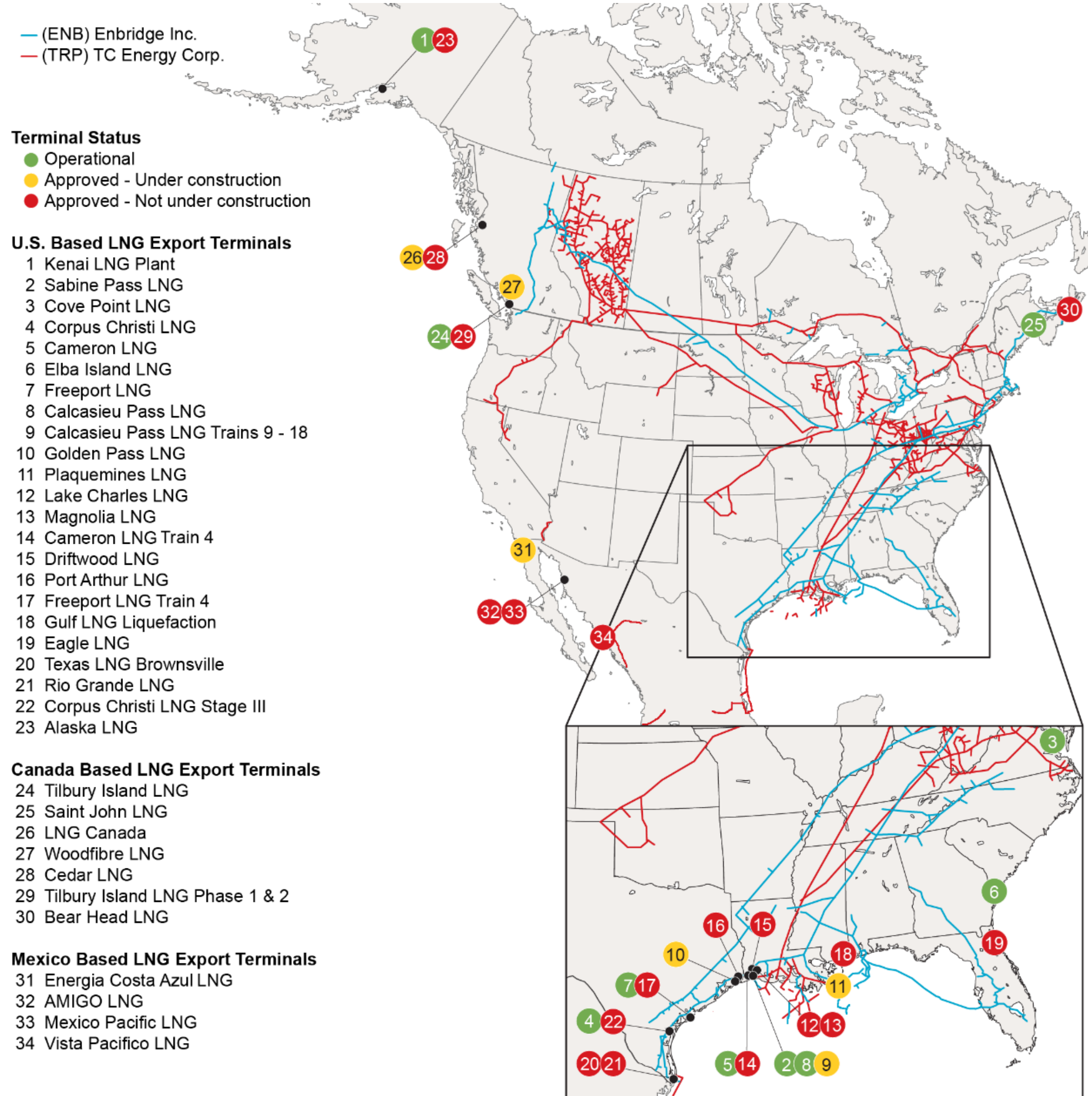


Source: BloombergNEF and CIBC World Markets Inc.

Biggest Impact Likely In The USGC

The U.S. Gulf Coast (USGC) is home to the vast majority of the U.S.' LNG export capacity. There are also numerous permitted projects that have yet to start construction as they compete for sufficient contracting to justify a final investment decision. These projects can be seen in the Exhibit 4 map below. May 2022 marked the second-highest level of U.S. LNG exports ever, second only to March of this year, and, thus, new capacity will be needed to supply growing demand.

Exhibit 4: LNG – North American LNG Projects, Current



Source: Bloomberg, FERC, S&P Capital IQ, Company reports and CIBC World Markets Inc.

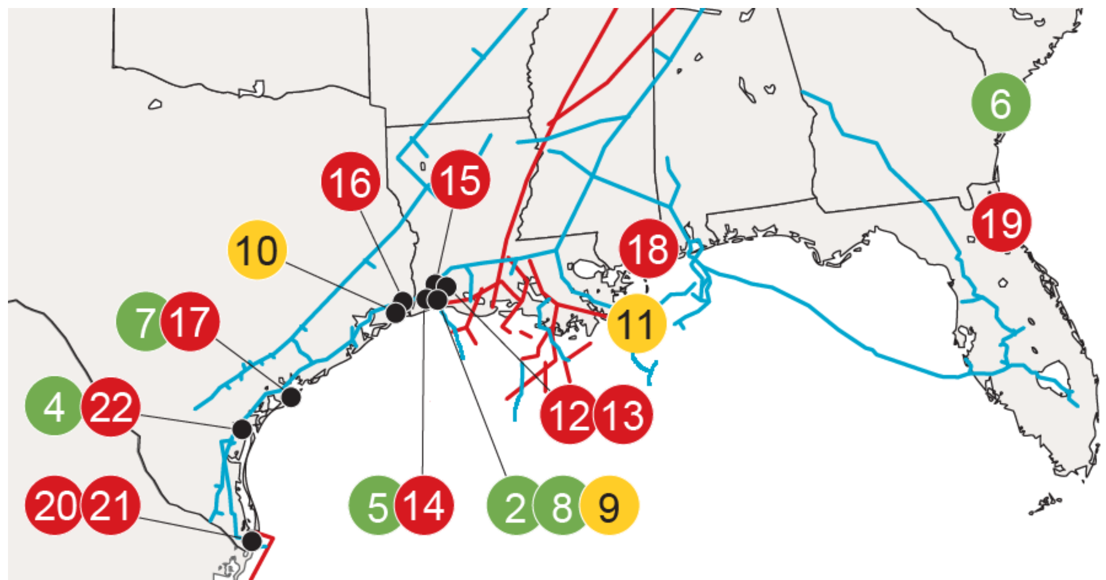
Longer term, even if half of the 155 Bcm of gas previously expected to be imported by Europe from Russia were substituted with additional LNG imports from other jurisdictions, it would still represent a material opportunity. To put in context, 155 Bcm is the equivalent of 112 Mtpa of LNG or 15 Bcf/d of natural gas. Replacing this level of imports would require more than doubling current U.S. capacity of about 13.5 Bcf/d (ignoring the current Freeport LNG outage). The total capacity of permitted facilities in the U.S. not yet under construction totals 153 Mtpa (20.1 Bcf/d of natural gas). The EU is using other measures to reduce reliance on Russian gas, including energy saving and maximizing wind and solar, but LNG is a major component of the plan. The implications are that effectively displacing Russian gas imports to Europe requires significant U.S. LNG and could see many projects reach FID in the next one or two years.

Europe has a few alternative supply sources to Russia, including Norway, Africa, and Azerbaijan, although the U.S. will still be the key LNG supplier. The U.S. is expected to add ~17 Bcm (~2.2 Bcf/d) to LNG supplies Y/Y, according to BloombergNEF, which will likely be absorbed into European markets given the U.S.' commitment to supply volumes to Europe to reduce the reliance on Russia. Whereas China was the biggest counterparty for new term contracts in 2021, European buyers have become more aggressive recently. European LNG imports will continue to face stiff competition from Asia, with demand for energy there growing, especially now that China has begun to lift lockdown restrictions. Since February 24, 2022, U.S. LNG terminal developers have secured at least 19 contracts for 24 Mtpa of LNG.

Distance to market should logically imply a relative advantage for West Coast Canadian and Mexican projects to supply the Asian market, whereas USGC supplies Europe. The Canadian and Mexican LNG industries have been slow to develop, and, as a result, some Asian customers have contracted with USGC LNG facilities. We expect Canada's relative lack of success in developing an LNG industry to leave it vulnerable to competition from the U.S. projects when competing for contracts.

Over the long term, most of the companies on our coverage list are likely to benefit from increasing LNG demand, especially from the LNG Canada project and its potential expansions. More impactful, in our opinion, is the potential advancement of USGC LNG projects. We expect the U.S. market to have the fastest LNG growth due to the number of permitted projects that have yet to reach FID. Examining the USGC more closely, we believe Enbridge is better positioned for LNG, especially in Texas, as can be seen from the Exhibit 5 map below, showing Enbridge pipes in blue and TC Energy pipes in red.

Exhibit 5: U.S. Gulf Coast LNG Projects, Current



Source: Bloomberg, FERC, S&P Capital IQ, Company reports and CIBC World Markets Inc.

Breaking Down LNG Potential

Of our coverage universe, TC Energy and Enbridge have the most exposure to the LNG market due to their extensive natural gas pipeline systems in the U.S. The table in Exhibit 6 details potential capital projects for both companies. We expect the companies to compete to supply other LNG projects, and so there should be upside from these figures.

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Exhibit 6: TC Energy and Enbridge – LNG Linked Projects, 2020 - 2027E

TC Energy Projects	Supply/Demand	Capacity (Bcf/d)	Expected In-service Date	Estimated Capital Cost ($B)	LNG Project Pipe Supports	Project Status
Secured						
Guadalajara	Mixed	0.5	Dec-20	NA	LNG supply near Manzanillo	In Service
Grand Chenier XPress	Demand	1.1	Apr-21	$0.2	Calcasieu Pass LNG	In Service
Coastal GasLink	Supply	2.1	2023	$0.2	LNG Canada	Under construction
Louisiana XPress Project	Demand	0.8	Q4/22	US$0.4	Sabine Pass LNG	Under construction
Unsecured						
Coastal GasLink Phase II	Supply	2.9	NA	$0.85	LNG Canada	Pending positive FID
Alberta XPress	Mixed	0.2	Early 2023	US$0.3	Sabine Pass LNG	Pending positive FID
North Baja XPress	Demand	0.5	Mid-2023	US$0.1	Costa Azul LNG	Pending positive FID
East Lateral XPress Project	Demand	0.7	Q1/25	US$0.3	Plaquemines LNG	Pending positive FID
Total Unsecured TRP Projects ($B)		**8.8**		**1.7**		
Enbridge Projects	**Supply/Demand**	**Capacity (Bcf/d)**	**Expected In-service Date**	**Estimated Capital Cost ($B)**	**LNG Project Pipe Supports**	**Project Status**
Secured						
Cameron Extension	Supply	2.1	Nov-21	0.2	Calcasieu Pass LNG	In Service
Venice Extension	Mixed	1.26	NA	US$0.4	Plaquemines LNG	Under construction
Unsecured						
Rio Bravo Pipeline	Supply	4.5	NA	US$1.2	Rio Grande LNG	Pending positive FID
VCP Expansion	Supply	0.72	NA	US$0.4	Texas LNG	Pending positive FID
T-North Expansion	Supply	0.4	2026	1.0	Prince Rupert / Kitimat	Pending positive FID
T-South Expansion	Supply	0.3	2027	2.5	Woodfibre LNG (Squamish)	Pending positive FID
Total Unsecured ENB Projects ($B)		**9.3**		**5.5**		

Source: Company reports and CIBC World Markets Inc.
Note: Amounts converted to CAD at a rate of 1.26. CGL Phase II capital cost is a CIBC estimate.

As of today, we view Enbridge as relatively better positioned in identified LNG opportunities, largely due to its Canadian exposure. The table in Exhibit 7 below details some of the per share exposures for both companies. We note that the LNG opportunities could grow as subsequent phases move to FID.

Exhibit 7: Enbridge And TC Energy – Potential Future LNG opportunities, 2022 Onward

	Enbridge	TC Energy	Notes
2021 Gas Transmission EBITDA Contribution	26%	76%	ENB includes DCP but not gas distribution
Unsecured LNG Opportunities	$5.5B	$1.7B	ENB includes T-North and T-South opportunities
Unsecured Capital Per Share	$2.71	$1.76	
Targeted Gas Opportunities Per Year	Up to $2B	US$1B	Current corporate targets
Impact To DCF Of A Half-point Increase In Terminal Multiple	$3.56/sh or 5.5%	$5.00/sh or 6.5%	We previously increased terminal multiples by 0.50 pts

Note: All amounts in C$, US$ projects converted at 1.26.
Source: Company reports and CIBC World Markets Inc.

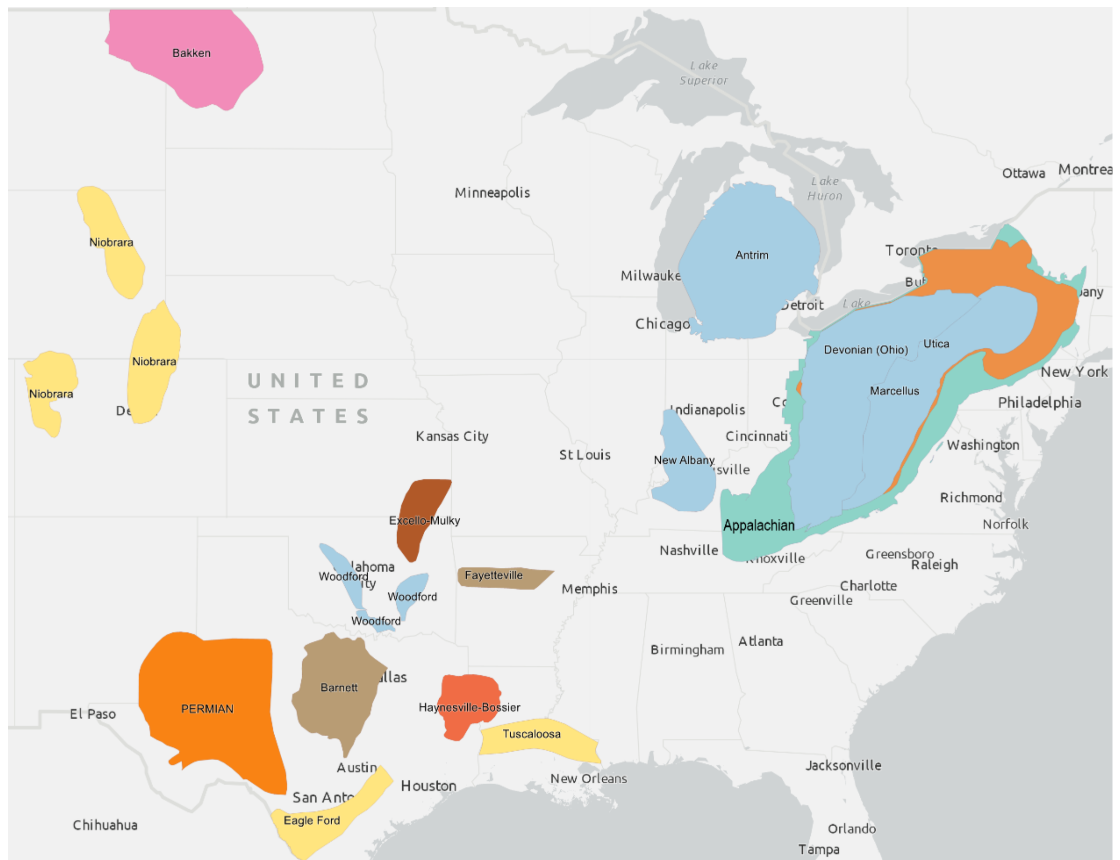
In particular, we expect the Woodfibre LNG project to reach a full FID, and arguably has reached a soft FID by issuing a notice to proceed to its construction contractor for pre-construction work. We note that the potential T-North and T-South projects are expected to use existing right-of-way, with the capital being included in the rate base. This makes those potential projects less risky than the experience TC Energy had with Coastal GasLink (CGL). That being said, CGL itself is a likely candidate for expansion, and we envision the expansion to have much less execution risk as the scope of the project is expected to be limited to increasing compression. The base CGL project had limited data on the new right-of-way. This was complicated by higher-than-expected amounts of rock and river crossings. External events, such as the impact of the pandemic on productivity, and blockades by Indigenous groups, also impacted progress on the project.

Upstream Benefits Are Also Likely

Growth in LNG demand is likely to increase demand for infrastructure further upstream beyond the connector pipelines required to supply LNG terminals. How much capacity is needed, and just as importantly where it is needed, is a subject of debate and competition. At a minimum, it adds support to the ability of the gas transmission businesses to continue adding growth projects, possibly in excess of our current estimates.

If we enter an LNG super cycle, there is a legitimate question about where the gas will be sourced. We expect much of it will come from the Permian and the Haynesville basins in Texas, for the simple reason that permitting should be easier for an intra-state pipeline compared to an interstate pipeline. The Exhibit 8 map shows the key basins and their proximity to the USGC.

Exhibit 8: U.S. – Shale Basins, June 2022



Source: S&P Capital IQ and CIBC World Markets Inc.

While there will no doubt be some interest in developing projects to move more gas from Appalachian basins like the Marcellus given their sheer size, pipeline permitting is a significant obstacle, more significant than in the case of intrastate pipelines from the Permian or Haynesville. Furthermore, pipeline systems connecting the Appalachian basin to the USGC are already operating at high utilization levels and will likely require looping pipeline to add significant capacity.

We note that Enbridge has recently completed a non-binding open season for the Louisiana Gulf Coast Expansion project on the Texas Eastern system. The open season contemplates service from the Haynesville supply region to market delivery points along the Texas Eastern USGC footprint, notably including to parts of Louisiana, as per the Exhibit 9 diagram.

Exhibit 9: Enbridge Inc. – Louisiana Gulf Coast Expansion Project Open Season Map, June 2022

Source: Company reports. .

Laterals to serve the phase-out and replacement of coal-fired generation with natural gas generation were already being targeted. In fact, Enbridge has over $4 billion of growth capital under development for such projects. While TC Energy has not published an equivalent number, we estimate it could total $1 billion of similar projects. With its growing offshore wind business in Europe, Enbridge is also positioned to benefit from the accelerated renewables buildout as part of the RePowerEU plan but has been methodical in its approach.

Honorable Mention To Pembina

Pembina has an opportunity to benefit from LNG growth as well. While the Cedar LNG Project (led by the Haisla Nation) in BC receives the most attention, gas development related to LNG Canada should also help its facilities business. Alliance Pipeline (50% owned with Enbridge as the partner) can also play a role as part of a path for Canadian gas producers to reach U.S. LNG markets.

Risk Factors – Permitting Challenges Remain

The main risk we see is permitting challenges for pipeline projects intended to supply LNG facilities. The Federal Energy Regulatory Commission (FERC) recently pursued a policy change that would have toughened the approach to both climate considerations and project need, making permitting more difficult. While these policies were suspended pending further public comment following backlash from Congress and industry, we expect the permitting environment will continue to become more challenging. In its initial effort to modify policies, FERC's intention was for the new requirements to apply to existing applications. After further consideration, FERC decided the contemplated changes would apply only to new applications. Consequently, a number of related pipeline projects were issued certificates by FERC. We note that in recent years, intervenors have had some notable success in challenging FERC-issued permits in court.

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More recently, the U.S. Environmental Protection Agency proposed a new rule seeking to restore state authority to review and potentially oppose natural gas pipelines and other infrastructure through the control of critical water quality permits. The proposed rule would reverse a Trump-era regulation and give state regulators more flexibility over what they consider in their reviews, and in setting review timelines. States would be able to evaluate impacts from any aspect of the project activity with the potential to affect water quality and would let state authorities define a reasonable period of time to conduct permitting reviews compared to within a year under the previous rule.

In addition to permitting, construction in an inflationary environment is a risk factor. We believe the WCSB market is experiencing more inflation due to the number of ongoing projects (Coastal GasLink, Trans Mountain Expansion to name a few). U.S. projects also have construction and inflation risk.

Conclusion

The fundamentals supporting North American gas transmission business growth have materially improved, partly based on geopolitical issues driving the push for more LNG. We think the USGC will be a major beneficiary, and of our coverage universe we believe Enbridge is best positioned to benefit, although the benefits to the industry are likely to be broad based. Optimistically, this could lead to terminal multiple expansion, but at the very least should reduce the perceived risk to gas infrastructure and bolster the outlook for capital programs.

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