Canadian LNG Export Industry Hinges on First Major Project Go-Ahead

By Christoffer Mylde, Sproule and Maurice Smith, Daily Oil Bulletin

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The increasingly expected go-ahead for the first major liquefied natural gas (LNG) project on the West Coast, which would represent the launch of one of the country's largest megaprojects, will be a defining moment for the Canadian natural gas industry, according to **Sproule**.

The Calgary based energy consulting firm said that should a final investment decision (FID) on the **Royal Dutch Shell plc** led LNG Canada project, expected this fall, be in the affirmative, it could set in motion other proposed major projects that have been on hold since a global supply glut triggered a commodity price collapse in 2014.

"There have been several encouraging signs in recent months that significantly add to the credibility of the project and has vastly increased the likelihood of a positive FID," said **Christoffer Mylde**, Sproule vice-president, Corporate Development.

"Shell as the majority shareholder of LNG Canada has been increasingly vocal about improving fundamentals for LNG, we have had [Malaysia's state-owned] **PETRONAS** join the project as a major partner with a 25 per cent stake, we have seen **Fluor** [**Corporation**] and **JGC** [**Corporation**] picked as prime engineering, procurement and construction contractors, and there is also a lot of anecdotal evidence of preparatory activities in Kitimat."

Additionally, the stars have largely aligned politically in support of the project, with the B.C. government scrapping the LNG tax which was introduced by the previous Liberal government, the deferral of the provincial sales tax on construction and exemptions offered for expected carbon tax increases, he said. Many First Nations are also on board, he notes, and while Ottawa has not yet agreed to an exemption from duties for steel modules to be delivered from Asian yards, the federal government's general support for the project suggests it will.

"LNG Canada now has a very strong consortium of players that are very motivated to get this project off the ground, it has the political support, it has the resource and I would say it would be very hard to see this one not move forward at this point."

Knock-on effect

Crucial to the future of the sector will be actual construction of the first liquefaction trains on the North Coast, which will likely snowball from there to future project expansion – additional trains – as well as other LNG project approvals from major players like **Chevron Corporation and Exxon Mobil Corporation** that have projects in the works.

"It is always the first project that is the most challenging to get built. The key for Canada is to get the first trains going because the economics will really come from the subsequent trains, three and four. Once you have built those initial trains with the pipeline, it is fairly inexpensive to expand the project. Brownfield expansion offers significantly better returns for the proponents," Mylde said.

"So with those first trains [going ahead], it is very likely that we will see further expansion. From a resource perspective upstream there is no question that we have a lot of gas in the Montney and the Duvernay to support it, so that is not going to be a concern for the Canadian projects."

Once the infrastructure and pipeline – which is expandable with increased compression – are in place, it becomes easier to support other projects potentially in Kitimat. And it would offer greater certainty to other players in terms of experience and confidence in the ability to get megaprojects built on the B.C. Coast, he said.

"Essentially you would be creating an industry that will be mobilized around this project that represents the largest megaproject in Canada, including the entire value chain of upstream through to downstream – including gas production, the pipeline component and liquefaction facility – about a $40 billion investment all in."

The Marginal molecule

Canadian natural gas currently represents the last molecules servicing the integrated North American market, something Mylde called "the marginal molecule" in a recent presentation exploring how Canadian gas fits into an increasingly liquid and integrated global natural gas market.

It's nothing new, he notes. Even ten years ago, Canadian gas was expected to become the marginal molecule, but then it was a challenge around the ability to produce abundant, cheap gas. The shale gas revolution – created by advances in horizontal drilling and multistage fracturing technology – changed all that. Applied to plays like the Montney and the Duvernay, the technology has made Canadian gas among the most competitive gas resources in the world.

Today, the challenge is to secure markets for that gas. Amid intense competition from the flood of gas hitting the market in the U.S., Canada's only market outlet, Canada remains peripheral and marginal, to the point it might be a net importer of natural gas within 25 years if current trends persist.

The situation can be looked at through a lens of fear – in which the resource may remain stranded and never reach its potential – or of opportunity, where LNG can resolve market access issues to help realize the full potential of the resource, Mylde said. He suspects the latter will prevail.

Window Reopening

The emerging macro supply and demand perspective is where LNG becomes a critical component, Mylde said, with the market now tightening up overall, creating room for exports. The market has underestimated demand growth in recent years and Mylde now expects the outlook for LNG demand to outstrip supply in the early to mid-2020s, opening the window for new projects to get over the approval hurdle to meet that demand.

"The market is growing pretty quickly – it grew by 10 per cent in 2017 alone. That's part of the reason why Shell has been pretty bullish in their view on LNG in that the market has tended to underestimate that growth, which is coming from new markets entering as LNG buyers. We have never had this many countries buying LNG as we have today, plus countries like China really ramped up their procurement strategy for LNG to wean themselves of coal in an accelerated manner."

A rapidly changing marketplace with the new tolling model for LNG in the U.S. offering more flexible terms and a more liquid market for cargos is creating an increasingly global market with more gas-on-gas competition, he added. This is a good thing for Canadian gas, as it remains a highly competitive and abundant resource.

But, as Mylde put it, Canada is sitting in the “last chance saloon,” reaching a pivotal moment that could reverberate for decades if it allows the moment to slip away. LNG Canada may represent the last opportunity for Canadian megaprojects within the existing window. “If there ever was a do-or-die moment for Canadian natural gas, it could happen with this project.”

Energy Powerhouse

The fact Canadian gas is cost competitive and that “Canada is still a major energy powerhouse,” bodes well for the sector, he said. In addition to low cost and abundance, Canadian gas has other advantages, such as proximity to market (half the transportation time or better to reach Asian ports compared to the Gulf of Mexico) and operating in a cooler climate, which creates less boil off in the liquefaction process. Canada also offers geopolitical portfolio diversification for buyers of LNG who don’t necessarily want to put all their eggs in one basket.

These factors help compensate for some of the disadvantages compared to the U.S. market, which benefits from lower pipeline costs, doesn’t have the challenges of building in remote sites and can utilize existing infrastructure. “Most of the U.S. projects were conversions from regasification terminals where they already had the storage in place, and the storage can be over 20 per cent of the total cost.”

It helps to have Canadian projects backed by world-class resources, he said. “The Montney has a strong competitive edge to it. The gas resource analysis we have done suggests that Montney gas can be competitive with just about any resource play in the world.”

Fundamentally, Canada is still the fifth largest gas producer in the world, possessing the only substantial tight gas resource play outside the U.S. that is a candidate for LNG, he notes. Though it still represents the marginal molecule in the North American context, Canada could protect its position as a major exporter amid growing competition from U.S. gas and reach its full potential by pursuing LNG exports.

“Given the gas resource we have against the backdrop of a successful LNG Canada launch, I would say there is every chance that we will see the Canadian LNG industry finally come of age, over the next five to 10 years,” said Mylde.

“It all hinges on this first project, which will create that platform both in terms of infrastructure and knowhow and confidence in the ability to get a project built, that will allow other players to follow. And then as the LNG market matures, Canada will have that opportunity to become a significant player.”

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