Failure to Reverse Megaproject Lull May Lead to Oil Price Spike

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August 2018

sproule.com

The crude oil market is emerging from a deep industry downturn with a fundamentally altered geopolitical landscape and increasing technological and climate uncertainty. Due to the pullback of investment in major projects through the downturn — largely continuing today — another oil price spike could be on the horizon, according to **Sproule**.

The oil market has more or less reached equilibrium and is now starting to draw on oil inventories, eating into the oversupply that dominated pricing during the downturn. With worldwide consumption soon to crest over 100 million bbls per day, Sproule forecasts that growth in light tight oil production will not be enough to sustain projected demand by 2020.

Until now, U.S. shale producers and OPEC have been able to adjust to the new marketplace and have largely been winners in the battle for global market share, according to the Calgary-based energy consulting firm. Other oil players with a lack of sanctioned projects have felt the greatest pain and resulting production declines during the downturn, setting up future shortfalls in output. Canada was somewhat insulated due to the number of projects already sanctioned and underway when the bust struck, said **Liam O'Brien**, Sproule petroleum engineer and market analyst.

Light tight oil has shown natural resilience due to producers' ability to rapidly accelerate production while simultaneously drive operating costs down from over $100 per bbl in 2014 to $30-$40 today. However, according to O'Brien, the sector has largely exhausted the potential to drive costs down much further, which means it needs to rely on additional production. Near term growth is expected to maintain about one million bbls per year, with ability to grow further hindered by factors such as infrastructure bottlenecks, increased development outside core areas, focus on cash returns rather than production growth, differentials depressing prices and service costs creeping back up.

Additional sources of supply are needed, he said. That means investment decisions are needed to be made now, particularly for long-lead supply sources like the oilsands and offshore megaprojects.

"Our expectation is that U.S. light tight oil won't be able to keep up with growing demand by itself. We need to see investment in those megaprojects now to meet that sustained demand growth we are expecting to see over the next few years," said O'Brien.

Even though final investment decisions on projects other than shale oil were up 85 per cent in 2017 over 2016 on a production volume basis, they remain far below pre-bust levels, he said. "The expectation is that we will see a bit of a gap because final investment decisions on these types of projects are still 50 per cent below the levels we saw from the 2012 to 2015 average. Investment needs to be made now so that supply can come on-stream in the 2019-2020 timeframe."

The industry is essentially paying the price for the lack of investment in long lead-time projects resulting from decisions made in 2015 and 2016, said **Christoffer Mylde**, Sproule vice-president, Corporate Development.

“If you compare new production coming on-stream in the five years leading up to the downturn to where we are now, contribution to production growth from megaprojects has halved. That’s a significant impact in terms of the ability of the market to meet the demand growth.”

“And it’s important to keep in mind that demand has been very strong and outperformed market expectations throughout the downturn, consistently maintaining growth between one and two million barrels of daily production annually. In addition, the market needs to replace existing production declining at five per cent every year. That means we need the megaprojects to meet future demand.”

Oilsands Canadianization

One potential silver lining is the increasing presence of Canadian-based ownership of oilsands projects since several super majors sold off all or portions of their oilsands holdings since 2014. That leaves more ownership in the hands of companies whose core resource and focus is on the oilsands.

“What that means for the oilsands is, these assets are in the hands of companies whose top priority will be exploiting these plays, so I think the access to capital will be there and the potential is there for them to have a significant role in the megaproject supply. We have already seen a few announcements this year for brownfield expansions,” O’Brien said.

“The fact that you have a few large, well-capitalized Canadian players driving the growth of that resource as a core part of their strategy will be a positive. There are also significant technology improvements that are helping make the oilsands more cost competitive,” added Mylde.

“We are also entering a new era where the geopolitical risk premium is helping to support a price environment where we are probably going to be in the $60-$80 range for a while. For any oilsands investment decisions, confidence in a price north of $60 is going to be a conducive price environment, especially for expansion projects.”

Looming Disruption

Post 2020, Sproule sees other factors coming into play including the electrification of now oil-consuming sectors, O’Brien said.

“Electric vehicle adoption is really going to be the first significant oil demand disruptor, particularly for passenger cars — we are already seeing them on the roads now. For the masses to adopt them, they need to be competitive with their internal combustion engine counterparts.”

The threshold for cost competitiveness happens when batteries reach the $100 per kilowatt-hour mark, he said. Right now, they are around $200 per kilowatt-hour, but should reach that threshold by 2025.

Since more than half of today’s oil demand comes from the transportation sector, electrification will have an impact, with the highest likelihood of causing near-term demand disruption, he said. Cars and light trucks make up about 26 per cent of crude demand.

Commercial trucks (18 per cent of oil demand) will follow, and eventually maritime (five per cent) and even aviation (six per cent) fossil fuel use will be impacted as electrification continues on its course. World leader

Norway has set a target for all domestic (short haul) flights to be electric by 2040, O'Brien noted, driven by climate change policy that incentivizes electrification of all forms of transportation.

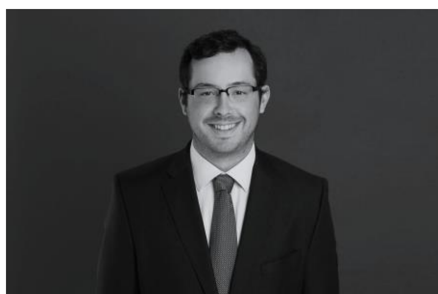
"If any country could make it happen in the near future, it is Norway. It is the world leader in electric vehicle adoption right now. Over 50 per cent of their new car sales now are electric vehicles."

And the propensity of consumer habits and desires to evolve quickly — as seen by recent movements to ban use of single-use plastic products like straws and bags — adds another level of uncertainty to future oil demand. The petrochemical sector consumes about 12 per cent of oil demand.

"We live in a world where those types of consumer preferences can change reasonably quickly," said Mylde. "Will this have an impact? I would say it's already starting to have an impact at the micro level in terms of how people are thinking about it. Single-use plastics represent 15 per cent of non-combustible demand for crude oil, and so it would be inconceivable that it wouldn't have an impact at some point."

Christoffer Mylde

Vice President, Corporate Development



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