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POTEN TANKER OPINION

And Then There Were Two . . .

Canadian Crude Oil Export Options

Currently, Canada produces a total of about 4 million barrels of crude oil per day (Mb/d). The production comes from different sources and processes with different economics: About 3.7 Mb/d is Western Canadian oil sands and synthetic crude and about 0.2 Mb/d East Coast is offshore crude. The Western Canadian production is land locked and the vast majority of the oil is currently transported to the US through pipelines and by rail, where it competes in a well-supplied local crude market and with other imports. To improve their competitive position, Western Canadian producers are looking to develop pipeline access to the coast, so they can ship crude to markets in Europe and the Far East. What is the status of these pipelines now that Keystone XL is off the table, at least for now?

Canada has been looking into three directions to create access to additional export markets: To the West with two pipeline options, to the East and to the South, through the U.S. Two of the four options have run into political road blocks in the last couple of weeks. On November 6th, the U.S. State department rejected the Keystone XL pipeline, a pipeline expansion intended to increase the capacity and shorten the route of existing pipelines from Hardisty in Western Canada to the US Gulf coast. The official explanation stated that 'the pipeline did not serve the national interests of the United States'. The second setback for export infrastructure occurred when Canada's recently elected Prime Minister Justin Trudeau announced that Canada would ban oil tankers along the Northern coast of British Colombia, where one of the Western pipelines was intended to end.

At this point, two viable pipeline projects to move oil to the coast remain: Kinder Morgan's expansion of the Trans Mountain pipeline (from Edmonton to the Vancouver area) from 300 Kb/day to 890 Kb/d to the Vancouver Area and TransCanada's 1.1 Mb/d Energy East pipeline to St. John on the East Coast. The marine terminal in the Vancouver area can accommodate Aframax size tankers while the terminal in St. John can handle VLCCs.

The Energy East Pipeline partially uses an existing gas pipeline and upgrades of existing infrastructure, combined with new pipeline segments. Earlier this month, TransCanada announced that they would cancel the construction of the marine terminal in the Quebec area, one of the two marine terminals along the pipeline, due to local objections, but it will continue to provide access to two Quebec refineries. The Energy East pipeline is scheduled to be completed by 2020. The expansion of the Trans Mountain pipeline is still in the

Fig. 1: Canadian / U.S. Crude Oil Pipeline Infrastructure & Proposals

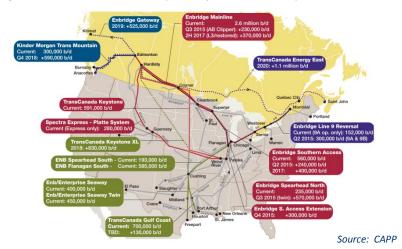
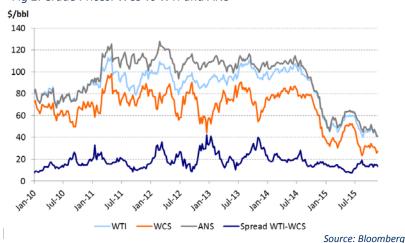


Fig 2: Crude Prices: WCS vs WTI and ANS



approval process. If successful, the current plan is for the pipeline to be operational by 2018.

It is critical for Western Canadian producers to obtain cost effective access to markets, especially if crude prices stay depressed. Currently, Western Canadian Select is pricing at about \$26.50 in Edmonton versus \$40 for WTI and \$40 for ANS crude on the West Coast. This discount is mainly a reflection of the high transportation costs of moving Western Canadian crude to refining markets. According to the Canadian Association of Petroleum Producers, the costs of shipping oil through the existing Trans Mountain pipeline is only about \$2.20 - \$2.50, which would significantly improve the economics for the producers, although this port only accommodates Aframax vessels, increasing the cost of marine transportation, compared to larger tonnage.

Either of these pipelines would be helpful to the tanker market as increased exports would reduce crude oil supply in North America and require additional tonnage for the exports and required U.S. replacement imports.