

ECONOMIC VIEWPOINT



Western Canada's Oil Prices Could Hold On to Their Recent Gains

After plummeting dramatically last fall, Western Canada's oil prices made a strong comeback after the Alberta government decided to cut back on the province's production. At first glance, the current spread between Canadian and U.S. benchmark prices does not appear sufficient to warrant transporting oil by rail to U.S. refineries, which could exert downward pressure on Canadian prices again. However, looking closer at what is happening on the U.S. market, particularly the strong demand for heavy oil in the U.S. Gulf Coast, we see that rail transport could remain viable with current prices. The price of western oil could therefore remain fairly high over the next months, thus limiting the adverse impact on the Canadian economy. Transportation problems will continue, however, to be a constraint for the Canadian oil industry over the medium term.

A Turbulent Period for Canadian Oil

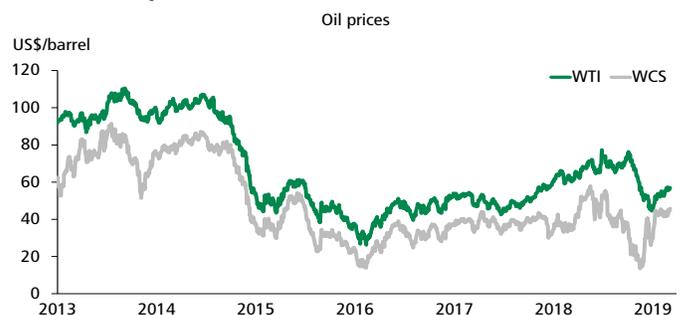
The issue of transporting crude oil from the West has been part of the Canadian landscape for many years, and everything points to this controversial issue remaining at the forefront for a long time still. As already discussed in an *Economic News* published on October 15, 2018, the downward pressure on Canadian oil intensified last fall after Alberta increased production and U.S. demand dropped temporarily. This drove up oil inventories and led to a nosedive in WCS (Western Canadian Select) oil prices. The discount on WCS relative to WTI (West Texas Intermediate) jumped to more than US\$40 a barrel, bringing the price of WCS down to less than US\$15 a barrel in mid-November 2018.

In response, the Alberta government announced in early December that the province's oil production would be cut by 325,000 barrels a day starting January 1st, 2019. This extraordinary decision explicitly aimed to eliminate the oil surplus and to get oil prices back to more normal levels. Prices reacted in a spectacular fashion, with the discount on the WCS moving from more than US\$30 a barrel to less than US\$10 in the space of a few days, restoring its price to roughly US\$40 a barrel (graph 1).

Is the Price of WCS Doomed to Fall Back Down?

There are questions as to the long-term effects that production cuts will have on the energy sector. However, we must concede that the short-term effect sought by the Alberta government was achieved. The rebound in western oil prices was astounding,

GRAPH 1
Production cuts in Alberta helped buoyed the rebound in Canadian oil prices



WTI: West Texas Intermediate; WCS: Western Canadian Select
Sources: Datastream, Bloomberg and Desjardins, Economic Studies

and, as the decrease in oil inventories appears to be confirmed, the government even decided to allow the production of an additional 75,000 barrels a day in February and March, followed by a further increase in April.

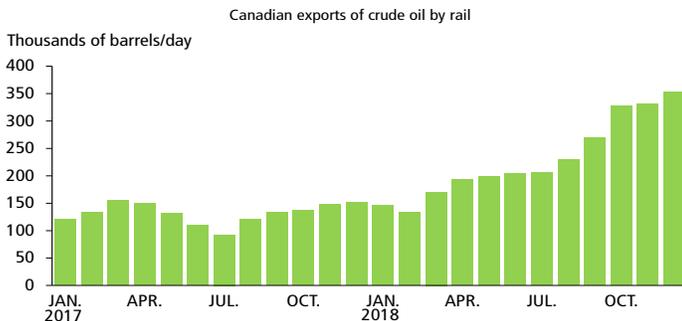
The small spread between WCS and WTI price does, however, worry many observers that the rebound in the price of WCS will not be sustainable. While existing pipelines are used to full capacity, rail transport has become an essential component for bringing western Canadian oil to the U.S. market (graph 2 on page 2). Therefore, the Alberta government's plan to support its oil sector also included using rail cars to potentially transport

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GRAPH 2
The use of railways to transport oil was at a record high in 2018



Sources: National Energy Board and Desjardins, Economic Studies

120,000 barrels of additional oil a day to the United States. However, rail transport is an expensive option, and an estimated spread of about US\$20 a barrel between WCS and WTI price is usually needed to justify sending WCS oil by train to refiners in the Gulf Coast. The current discount of about US\$10 a barrel therefore seems insufficient at first glance, prompting fears of a decline in rail transport and a return of downward pressure on Western Canada's oil prices. Some observers are already detecting a decrease in rail transport of crude oil since the beginning of 2019.

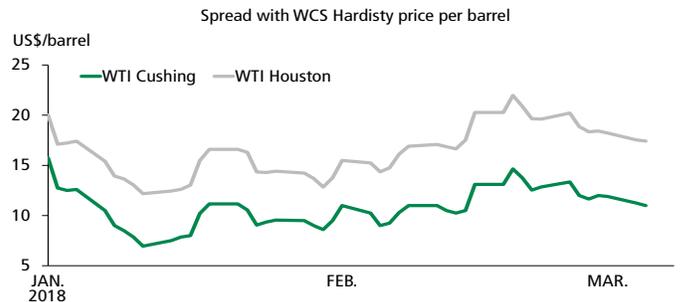
Not All Trains Lead to Cushing

The benchmark prices for the various types of oil reflect their individual prices in their main storage and refining hub. The commonly quoted WTI price therefore refers to the price trading at Cushing in Oklahoma, and the WCS represents the price at Hardisty in Alberta¹. The difference between the two should theoretically take into account the cost of transportation and the difference in quality. However, regional factors also affect prices and create a divergence between the various hubs in the United States. More specifically, the same barrel trades at a different price depending on where it is purchased.

The Houston hub, located in the PADD 3 (Petroleum Administration for Defense Districts), has grown in recent years because, unlike Cushing, it has access to sea routes. Moreover, it represents more than half of U.S. refining capacities. Pipeline constraints in the Permian Basin, caused by the region's high oil production, and strong overseas demand for U.S. petroleum exports put upward pressure on the price of WTI in Houston. It currently has a premium of more than US\$5 compared to the same barrel trading at Cushing. If we compare the price of WCS traded at Hardisty to the price of WTI at Houston, rather than Cushing, the difference is currently around US\$20, which would justify using rail transport (graph 3). We also see that

¹ *Oil Price Differentials Explained: Why Alberta Crude Sells at a Deep Discount*, *Oil Sands Magazine*, Market Insights, updated December 13, 2018. (Consulted on March 5, 2019).

GRAPH 3
Higher prices in Houston could make rail transport affordable for Canadian oil



WTI: West Texas Intermediate; WCS: Western Canadian Select
Sources: Bloomberg and Desjardins, Economic Studies

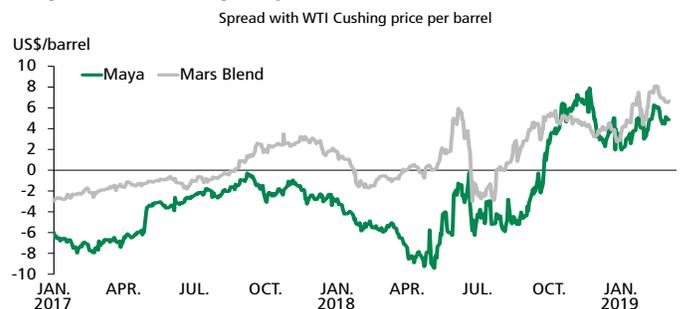
more than 50% of Canadian crude exports by rail ends up in the U.S. Gulf Coast, which would support the current price differential.

Houston in Search of Heavy Oil

Another factor must be considered when assessing the viability of rail transport: the price of WCS also varies by destination. It tends to be higher in Houston than in Cushing because of its higher demand for heavy oil. Cushing, in PADD 2, is still the largest customer for Canadian heavy oil, receiving more than 60% of Canadian crude oil imports. However, its refining capacities are beginning to peak, limiting the prospects for growth in Canadian oil demand. Houston, meanwhile, is the largest consumer of heavy crude oil worldwide and is an attractive market for Canadian exports.

More recently, a premium on the price of barrels of heavier oil, like WCS, Maya and Mars Blend, even appeared in the United States (graph 4), as surging U.S. production flooded the market with light oil and various factors restricted the country's heavy oil supply. The effect is felt most acutely in Houston, where imports from its main traditional suppliers are declining. Saudi Arabia diverted its exports to other destinations, Mexican oil fields are maturing and Venezuela's troubles persist.

GRAPH 4
Heavy oil now sells for more than light oil in the United States, despite its inferior quality



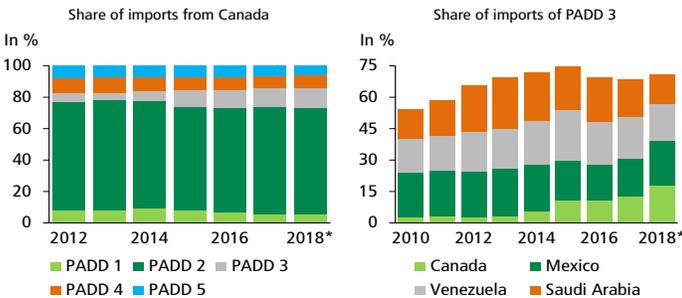
WTI: West Texas Intermediate
Sources: Bloomberg and Desjardins, Economic Studies

These factors forced the U.S. Gulf Coast to turn to Canada as a source of heavy oil, with the country representing a larger share of the region's oil imports (graph 5). The sanctions announced on Venezuela only make the heavy oil supply issue worse and support the higher prices in the region. Therefore, the price per barrel of WCS sold in the United States is higher than the traditionally observed spread suggests.

Within this context, the harmful consequences of last fall's slump in WCS prices could be less severe than initially thought. The Bank of Canada evaluated in its January [Monetary Policy Report](#) that the decrease of oil prices could lead to a 0.5% reduction of the Canadian GDP level by the end of 2020. This estimate assumed, however, a WCS price around US\$30 per barrel, which now appears slightly too conservative.

However, we should not forget that railways also have limited capacities and that they are increasingly less available. Alberta's cuts are a temporary solution, and the risk of higher-than-expected output from the region is still there. The deficit in heavy crude oil in the U.S. Gulf Coast could also be erased if Saudi Arabia backtracks on its agreement to cut production or if the situation in Venezuela improves. This could reintroduce a discount on heavy oil prices in the region. The price of WCS could therefore stay fairly high in the coming months, but the downside risks remain comfortably in place over the medium and long term, especially with the uncertainty surrounding the construction of future pipelines.

GRAPH 5
Canada is increasingly meeting demand for crude oil from refineries in the U.S. Gulf Coast



PADD: Petroleum Administration for Defense Districts; * Estimate for 2018.
 Sources: Energy Information Administration and Desjardins, Economic Studies

What Can We Expect from Canadian Oil Prices?

Considering the spread between the WCS price in Canada and in its U.S. destination, rail transport seems to remain a viable short-term option for Alberta's crude oil. To put it simply, high heavy crude prices in the Gulf Coast justify WCS price of about US\$40 a barrel in Alberta. It therefore seems unlikely that strong downward pressure on the price of WCS will return in the short run.

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