

## **BACKGROUNDER**

### **What is the light-heavy price differential?**

In North America, the benchmark price of oil is the price of West Texas Intermediate (WTI) oil at Cushing, Oklahoma. WTI oil is a high quality, light sweet crude that is easily refined. The price of WTI serves as a reference price in the marketplace for all other oil produced in North America.

In Saskatchewan, therefore, the realized price for the same quality of oil as WTI would be substantially lower because of transportation costs that must be borne to move oil to American markets.

The price that Saskatchewan heavy oil producers receive is generally based on the price of Western Canada Select (WCS), a heavy, sour blend of crude oil originating in Alberta that serves as a benchmark oil price in western Canada. WCS commands a lower price than WTI due to its lower quality and the costs incurred to transport it to American refineries.

Roughly 60 per cent of the oil produced in Saskatchewan is non-heavy, a range of light and medium, and sells above the WCS price. About 40 per cent of the oil produced in our province is heavy.

The difference between the price of WTI and WCS is commonly referred to as the **light-heavy price differential**. Our oil forecasts not only incorporate private sector forecasts for WTI oil prices, but also the light-heavy price differential and the exchange rate to develop a forecast for Saskatchewan well-head prices.

### **Why has the light-heavy oil price differential widened?**

There will always be volatility in oil prices due to market conditions. Additionally, in recent months there have been refinery outages in the United States and increased new oil sands production coming online in Alberta that has not been matched with increased pipeline capacity. These two factors have been the main contributors to a widening differential.

A shortage of pipeline capacity is the key driver to the long-term price differential between the oil we sell and WTI. This is why it is so important our federal government move to increase our pipeline capacity.

### **Why does your differential forecast appear lower than others we've seen?**

It is important to note that WCS prices quoted in the media are typically quoted at Hardisty, Alberta in \$US per barrel (the terminal where the WCS blend originates).

Our revenue forecast, however, uses the price of WCS at Chicago, Illinois, as a percentage of WTI at Cushing, Oklahoma because the price of Saskatchewan oil is more dependant on the prices paid in the U.S market.

So while our price differential forecast may differ with prices quoted elsewhere in the media, they are essentially two different market prices. WCS prices at Chicago will be higher, and the differential will be

narrower, than realized WCS prices at Hardisty, Alberta because of transportation costs that are factored into Hardisty prices.

### **What is the impact of the wider light-heavy differential we have been experiencing in Saskatchewan?**

The positive impacts of higher WTI oil prices for the first seven months of the year and a lower value of the Canadian dollar are being partially offset by the wider light-heavy differential in the mid-year forecast.

The light-heavy differential averaged 25.3 per cent (as a percent of WTI) over the first half of the year. The mid-year forecast assumes the differential will average 38.1 per cent over the second half of the fiscal year, for a full-year average of 31.7 per cent. This is an increase of 9.6 percentage points from the budget assumption of 22.1 per cent and results in a significant offset to higher WTI prices.

The result of the mid year forecast changes is a well-head price forecast, in Canadian dollars, of \$56.37 per barrel at mid-year which is up \$2.01 from budget, but down \$6.46 per barrel from first quarter to reflect the recent widening of the light-heavy price differential.

#### **2018-19 OIL AND NATURAL GAS REVENUE RECONCILIATION**

(Millions of Dollars)

<b>2018-19 Budget</b>	<b>700.1</b>
Impact of forecast changes:	
Increase in WTI oil price	105.8
Decrease in exchange rate	11.2
Increase in light-heavy differential	(96.0)
Other changes	(2.9)
<b>Total Change from Budget</b>	<b>18.1</b>
<b>2018-19 Mid-Year Projection</b>	<b>718.2</b>