Sproule

INSIGHTS

Oil and Gas Price Forecast Commentary

January 2022

Sproule's outlook for oil and gas prices is based on information obtained from various sources, including government agencies, industry publications, oil refiners, and natural gas marketers as well as consideration for several global stock exchanges

Global Crude Oil Outlook

Global crude prices exited 2021 in the mid-$70s as crude markets continue their path to recovery in the wake of the COVID-19 pandemic. 2021 saw widespread vaccine rollouts and the lifting of demand-disrupting lockdown measures, causing a surge in economic activity and driving crude demand back towards 100 million bbl/d. Road and aviation fuel demand, two of the hardest hit sectors during the pandemic, recovered significantly during 2021 as travelers began returning to pre-pandemic behavior despite multiple waves of COVID-19 outbreaks.

Looking ahead, we expect global crude demand to continue its recovery, reaching pre-pandemic levels early in 2022 and exiting the year with global crude demand back above 100 million bbl/d. Beyond 2022, we expect annual demand growth between 0.5 and 1.0 million bbl/d over the forecast period as robust economic activity and limited disruption from alternate fuels drive global demand growth.

Commentary Highlights

- Global Crude Oil Outlook
- Canadian Crude Oil Outlook
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- U.S. Natural Gas Prices
- Canadian Natural Gas Prices

Global Crude Oil Outlook

On the supply side, we see disciplined U.S. Light Tight Oil (LTO) growth, OPEC+ market support, and increased cost of capital for global upstream investment as the dominant themes in the coming years. For U.S. LTO, with breakeven costs in the $30 to $40 range within core shale areas, and $50 to $60 on the periphery, Sproule expects to see some LTO production growth over the forecast period. However, reduced access to low-cost capital and producer's shift towards disciplined capital spending in favor of free cash flow generation should limit production growth rates relative to those seen from 2016-2019.

With respect to OPEC+, near 100% compliance with announced curtailments helped support crude prices over much of 2020 and 2021. Going into 2022, considering the cartel's efforts to support global crude markets over the last 2 years, Sproule expects OPEC+ production increases will be measured against the broader global demand recovery. Outside of U.S. LTO and OPEC+, Sproule believes that additional supply from capital intensive mega projects, including deepwater projects and the Canadian oil sands, will be required to satisfy future demand growth. Capital markets funding these projects, however, are becoming increasingly ESG focused and are demanding an additional return premium on major upstream oil and gas investments.

Sproule expects sustained higher prices are required to attract the upstream investment needed to meet global crude demand growth. Considering this, we expect the long-term price of crude should be supported above breakeven costs for U.S. LTO. Combining the outlook for modest U.S. LTO growth, gradual OPEC+ supply increases, increased cost of capital, and strengthening global demand, Sproule's long-term forecast is set at $68.00 US per barrel for WTI and $70.00 US per barrel for Brent in 2024 with an escalation rate of 2.0% thereafter.

Canadian Crude Oil Outlook

Sproule's price outlook for Canadian crudes sees the current differential to WTI remaining constant over the forecast period. The impact of the COVID-19 pandemic on Canadian crudes was substantial, with realized pricing nearing $0/bbl in Q2 2020. Since that time, Canadian differentials have normalized as increased Western Canadian production has found balance with increased pipeline egress, including the completion of the Enbridge Line 3 expansion project in the second half of 2021.

Looking ahead, while Canadian light oil faces supply competition from U.S. LTO plays, new market opportunities are arising for Canadian heavy crudes. U.S. Gulf Coast refiners are increasingly seeking Canadian heavy oil as imports from Venezuela and Mexico decline. Adding to this is the expectation for the TMX project to add 590,000 bbl/d of incremental crude egress leaving Western Canada in 2023. The dynamics of increased U.S. demand for Canadian crude combined with additional pipeline capacity and expectations for modest Canadian supply growth are reflected in a long-term CLS differential of $4.00 US/bbl below WTI and a long-term WCS differential of $12.50 US/bbl below WTI.

U.S. Natural Gas Prices

The robust growth of U.S. natural gas supply experienced from 2016 to 2019 occurred in a different operating environment from the current market. Natural gas producers, similar to their oil counterparts, are now focusing on free cash flow generation for debt reduction and increased cash returns to shareholders. Over the forecast period, reduced capital spending at the wellhead should reduce supply growth rates relative to those seen from 2016-2019.

Demand for U.S. natural gas, on the other hand, is poised for significant growth in the medium to long term with increasing LNG export capacity, increased exports to Mexico, and a post-COVID-19 domestic demand recovery. In recent months, this combination of disciplined supply growth and strong demand has helped lift and sustain Henry Hub prices above multi-year lows experienced in late 2019-early 2020. However, notwithstanding weather-induced price volatility, the marginal cost of dry gas production growth from plays like the Haynesville, Marcellus and Utica should place a natural ceiling on U.S. natural gas prices. To reflect these factors, Sproule's outlook at Henry Hub is $3.25 US per MMbtu from 2024+, with an escalation rate of 2.0% thereafter.

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About Sproule

A global energy consulting firm, Sproule provides technical and commercial knowledge to help clients discover value from energy resources around the world. Our perspectives are anchored by a deep bench of subsurface expertise, financial and commercial acumen and operational experience. We leverage this to help our clients accurately understand value drivers, manage risk and optimize

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Global Gas and LNG Prices

Shifting outside of North America, after a prolonged period of low prices, global gas and LNG prices are reaching all-time highs as tight supplies struggle to meet record demand. In Europe, natural gas demand for power generation has surged with a return to pandemic economic and industrial activity and widespread switch from coal to gas-fired power plants in recent years. However, with Asian LNG demand diverting LNG cargoes away from Europe, and reduced gas flows from Norway and Russia, the natural gas supply shortfall in Europe is causing prices to surge.

Additionally, given efforts to decarbonize the power sector in recent years, Europe can no longer rely on the traditional option of switching to coal-fired power plants during periods of high gas prices, adding to upward pricing pressure on natural gas. Considering these factors, Sproule expects sustained record NBP and TTF gas prices into 2022. Longer term, our view is that current price levels are unsustainable, and will begin to decrease as the market finds balance with increased LNG exports from regions like the US Gulf Coast and increased natural gas supply to Europe via the Nord Stream 2 pipeline.

Ultimately, we see European gas prices stabilizing around the marginal cost of US LNG supplied to Europe plus a carbon price premium, with NBP trading at $8.10 US per MMbtu by 2024 and TTF trading at $8.05 US per MMbtu by 2024, with an escalation rate of 2.0% thereafter.

Canadian Natural Gas Prices

In Western Canada, aside from short-term maintenance outages, widespread debottlenecking efforts on NGTL in recent years has helped stabilize AECO differentials to Henry Hub relative to volatility seen from 2015 – 2019. However, without meaningful access to Asian and European markets via LNG, Canadian natural gas will continue to be the marginal molecule servicing the integrated North American market. Until significant volumes of Canadian gas start flowing west to LNG export facilities, pricing in Western Canada will be limited to the marginal cost of U.S. supply minus a transportation differential into U.S. markets, which in our view means long-term sustained pricing below $3.00 US/MMbtu at AECO, notwithstanding positive demand drivers regionally like coal to natural gas switching in the power generation space. To reflect these factors, Sproule's outlook at AECO is $3.02 CAD per MMbtu by 2024+, reflecting a long-term differential to Henry Hub of $0.80 US per MMbtu.

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Important Notice

This data is combined with Sproule's assumptions and view in respect of long-term prices, inflation rates, and exchange rates, together with estimates of transportation costs and prices of competing fuels, to forecast wellhead and plantgate prices for oil, natural gas, and natural gas by-products.

Users of this information are asked to recognize the high degree of uncertainty associated with forecasting oil and gas prices, and Sproule Associates Limited takes no responsibility for the application of these numbers by anyone other than the professionals of Sproule Associates Limited.

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