

CRUDE OIL LNG NATURAL GAS TANKERS TRANSPORT

## Four Export Challenges To Watch

Important trends could buffet the growing U.S. export market.

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A tugboat inches a tanker toward its dock at Corpus Christi, Texas, to take on a load of American crude oil. Source: Port of Corpus Christi

Since the shale gale kicked into high gear in the last decade, North America's energy landscape was fundamentally transformed. Encouraged by recent high prices, full-throttle development from shale producers had led to record exports. Crude export (excluding Canada) have risen from zero in 2015 to about 1.5 million barrels per day

(MMbbl/d), natural gas net trade has swung in the same time period from a deficit of 3 billion cubic feet per day (Bcf/d) to a surplus of 1 Bcf/d, largely through pipelines to Mexico and LNG via the Gulf Coast.

But can it last?

American oil and gas created its own ecosystem but it is not isolated from the world. In particular:

- Prices affect worldwide production and consumption;
- Infrastructure development is complex and slow;
- Trade wars and politics disrupt logistics and purchasing patterns; and
- Economic health determines demand and investment.

The challenges for exporters mostly arise from these four areas.

## **\$100 again?**

Since hitting bottom at \$42 per barrel (bbl), West Texas Intermediate (WTI) has staged a massive comeback to the \$70s. Natural gas at Henry Hub has also rallied above \$3 per million British thermal units (MMBtu) on the back of depleted inventory and strong summer demand. Speculation abounds for oil to hit \$100/bbl and natural gas to spike again.

We considered nine factors to watch in the oil market supporting the upward trajectory. Global supply and demand are finely balanced, but the upcoming Iranian sanctions could disrupt up to 2 MMbbl/d of supply and Saudi Arabia's spare capacity has dwindled down to less than 2% of global demand.

With low breakeven costs and plentiful capital, shale production has outpaced infrastructure, resulting in an export bottleneck and a widening Brent-WTI price spread. The Saudis are inclined to manage the \$70/bbl to \$80/bbl Brent crude range as it stabilizes their budget. Market sentiment remains very strong, and pricing backwardation is persistent. All signs point to a continued uptrend in the near term.

## The woes of gas

Natural gas, on the other hand, is still mired in a decade-long struggle of overcapacity. Slowly but surely, demands have been created in power, transportation, and chemical sectors domestically. A massive LNG export industry has sprung up since 2016 to arbitrage the overseas market. Prices in Asia and Europe have recovered as the commodity enjoys widespread adoption for power generation.

The Japanese spot price has sustained above \$10/MMBtu, providing a respectable margin for American exporters. But with underutilized LNG facilities globally, any new large-scale projects are unlikely to produce decent rates of return.

During the 2014-2016 downturn, producers and service providers alike made brutal cost adjustments and turned the U.S. into a major oil and gas exporter. To accommodate surging exports, companies have been rushing to build docks, terminals, LNG plants, vessels and pipelines. Natural gas production and pipeline infrastructure have historically been near the Gulf Coast where export takes place.

Connectivity is therefore straightforward after initial LNG plant conversion from gasification to liquefaction. In South Texas, a few major pipelines were quickly constructed after the 2013 Mexican energy reform and Mexican export promptly doubled to 4 Bcf/d. Here again, infrastructure is relatively simple.

## The growth driver

Ever since the 40-year crude oil export ban was lifted in 2015, crude and petroleum liquids exports have surged along with gasoline and distillate. The growth driver, the Permian Basin, has been wrangling with sand, water, labor, trucks—and now limited pipeline space similar to the Bakken and Marcellus shales in their heydays. Production is at a record high but will likely flatten out next year as producers, exhausted of options, leave drilled wells uncompleted.

A few new takeaway pipelines are slated to come online by the end of 2019, which is reflected in the wide but narrowing (toward 2020) Midland-Gulf Coast spread. Ideally, excess supply would be absorbed by additional local refining. However, the

challenges of building new refineries and reconfiguring existing heavy crude refineries on the Gulf Coast proved to be insurmountable.

Elsewhere, ports and midstream operators from Houston to Freeport to Corpus Christi in Texas are scrambling to expand tank terminals and improve access to vessels, especially the most efficient very large crude carriers, which currently can only be accommodated at Louisiana's LOOP terminal. With speed and capital behind all these export projects, time is the only obstacle. In fact, analysts say that the eventual sustained export level is 4 MMbbl/d but by the time all facilities on the books are completed there may be 1.5 MMbbl/d to 2 MMbbl/d of excess export capacity.

## **Trades, sanctions, reforms**

On the trade and politics front, President Trump's imposition of "America First" policies looms large. In September, China slapped a retaliatory 10% tariff on U.S. LNG imports while leaving crude oil trade alone. It is noteworthy that Chinese crude imports from the U.S. rose from next-to-nothing in 2016 to 377,000 barrels per day in July and then dropped to zero in August. U.S.-to-China LNG shipment has also dropped sharply to near zero recently.

While alternative buyers are readily available for now, it is a long-term threat to lose a large, stable customer in a well-supplied market.

As for the sanctions on Iran scheduled for November, the hardline approach of the Trump administration has chilled European and Asian buyers of Iranian crude. Since the sanction announcement in May, Iranian oil shipment dropped by about 1.5 MMbbl/d as some of the biggest customers in India and Europe drastically cut back. China is expected to circumvent it due to its relative insularity to the dollar and U.S. banking system, especially while it is cutting American imports.

Iran's loss, along with Venezuela's spiraling production, is a boon to all other oil exporters as they make up the shortfall.

The conclusion of NAFTA negotiation left energy flow across Canada and Mexico largely untouched. However, Mexico's new president won on a populist platform that favors Pemex. Although recent, successful foreign oil and gas investments and access

to cheap U.S. gasoline and natural gas have softened his nationalistic stance, that country's energy reform remains highly vulnerable to public sentiment. The upside potential for Mexican export growth is thus limited.

## **Crisis watch**

Despite their lone strength in the commodity space, oil and gas ultimately rely on economic use. Signs of trade wars hurting commerce and capital investments have surfaced since this summer. China is deleveraging and trying to contain the damage from slowing growth and trade spats with the U.S. Emerging markets had a cascade of currency collapse and inflation spikes, with Turkey and Argentina leading the pack.

If a 1998-style currency and debt crisis develops, it will likely wash ashore here. Europe's outlook is gloomy amid the ending of monetary stimulus, the Brexit quagmire and the Italian political standoff. Italy has an outsize government bond market with fast-rising yields; investors are nervous about the potential unraveling of the EU yet again.

The U.S. economy has become somewhat insulated from high energy prices. Yet central bank policy divergence from Europe and others resulted in rising yields and interest rates and a strong dollar. An ill-timed, late-cycle fiscal stimulus in the form of corporate tax cuts also increased the systemic fragility and reduced the political tools to react to an eventual slowdown. Unbalanced economic growth detached from the rest of the world is unlikely to be sustainable. In fact, the International Monetary Fund recently reduced its 2019 global growth forecast from 3.9% to 3.7%, pointing to trade wars and high oil prices as culprits.

## **Dominance continues**

Given the robust economic growth with no sign of recession and muted geopolitical risk, sentiment is remarkably positive with few catalysts to dislodge oil from the uptrend for the foreseeable future.

The worldwide movement away from coal and nuclear to renewables or cleaner energy also adds to the impetus for natural gas. Apart from a general economic recession, the few bearish factors are mildly threatening to U.S. energy dominance. Challenges remain, but the country's structurally low-cost basis and newfound agility should allow it to maintain and even capture greater market shares in the coming decades.

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