

# NATURAL GAS MARKET SPOTLIGHT

*THE CASE FOR \$5.00 NYMEX NATURAL GAS*



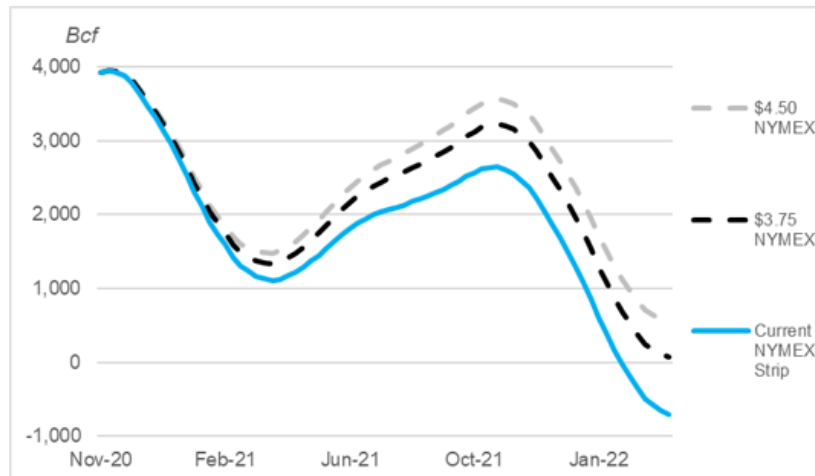
## INTRO

The series of events that has set up the current pricing structure for the NYMEX Natural Gas market has warranted this spotlight. The argument is that COVID-19 has created a physically irrational price forecast. Prices have been "too low for too long", hurting producers, and creating a potentially undersupplied market in the next 6-12 months. The United States has seen an innumerable amount of market shortages in 2020, from lumber, to beef, to toilet paper. The complex, and now global natural gas market has taken longer to reveal its' market implications. While there is still any number of possible outcomes, the diagnosis of this market by Andy Weissman, (a highly respected market analyst at EBW Analytics) is that the upside price risk heavily outweighs the downside risk in the NYMEX Natural Gas Market at this time.

## NATURAL GAS SUPPLY

- Production has fallen since the start of the COVID-19 Pandemic due to record low pricing.
- The Rig Count has fallen 40% in the last year, hampering hopes for new supply.
- The argument is that prices will need to consistently top \$4 to incentivize new drilling and new production. There would be a 3-4 month delay before new supply effects would be felt.
- Under current prices, storage would not be sufficiently refilled for the '21-'22 Winter, indicating a severe shortage that could result in prices between \$4.00 - \$5.00

**Natural Gas Storage Trajectory in Most-Likely Scenario at Different Price Points, November 2020-March 2022 (Bcf)**

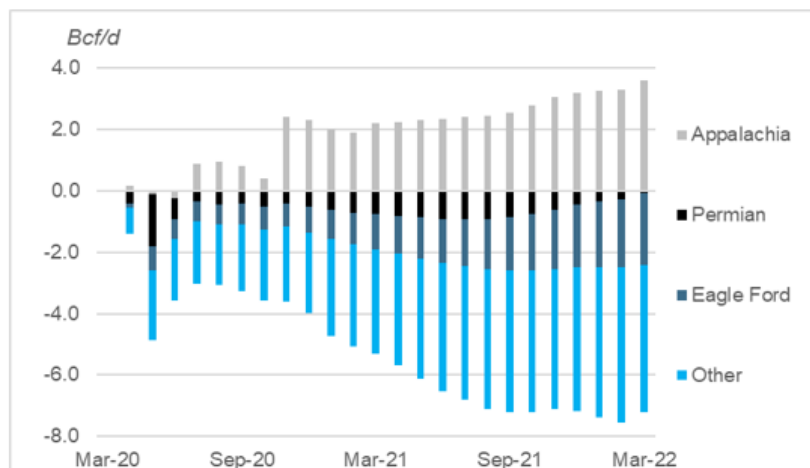


Source: EBW Analytics

## SUPPLY CONTINUED

- Oil prices have failed to top \$45 since early March, limiting new associated natural gas supply.
- New pipelines are expected in 2021 to move Permian gas to the Gulf, needed for LNG demand.
- The lack of new pipeline infrastructure would also keep production from rising in Appalachia.
- Period of unabated growth has ended, profits for producers must be realized.

**Actual and Projected Natural Gas Production Changes Since March 2020, March 2020-March 2022 (Bcf/d)**

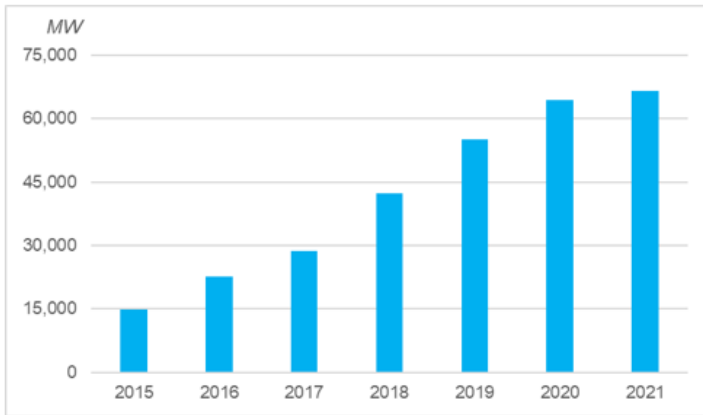


Source: EBW Analytics

# NATURAL GAS DEMAND

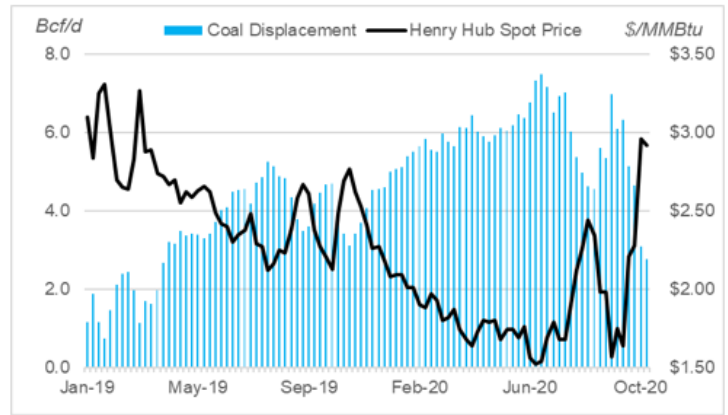
- Demand for Natural Gas has increased dramatically in the past 2 months and will likely be sustained.
- LNG exports have topped 10.5 BCF/D (12% of total supply) and will likely stay above 9 BCF/D in 2021.
- Many coal power plants were retired during the gas boom of the last 5 years. This means we won't be able to heavily rely on coal power to displace gas usage, if a gas shortage pushes prices higher.
- November weather has been extremely mild, keeping demand deceptively low. If this winter is average in terms of heating demand, we would likely see record-high storage withdrawals.

**Cumulative Reduction in Operating Coal Capacity, 2015-2021 (MW)**



Source: EBW Analytics, EIA

**Henry Hub Spot Prices (\$/MMBtu) and Price-Induced Coal Displacement (Bcf/d), January 2019-November 2020**

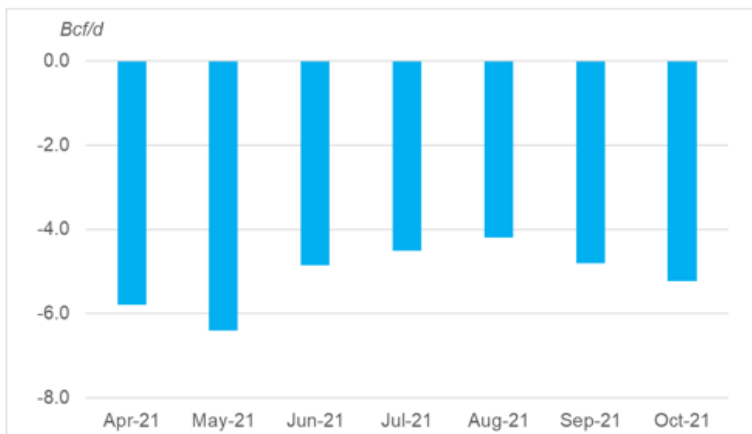


Source: EBW Analytics

# PRICING IMPLICATIONS

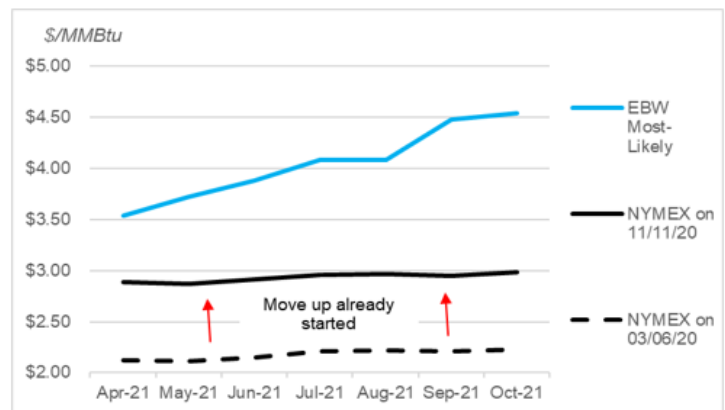
- The "Core" non-weather related supply/demand fundamentals are indicating a much tighter market in 2021. A 5 BCF/D tighter market in 2021 would mean 1,500 BCF less in storage, holding weather constant.
- Any scenario where storage gets below 1,000 BCF in March would bring higher, shortage driven prices.
- Weather dependent demand will have much more volatile impacts on this market, likely to the upside.
- EBW expects storage shortages to be a real concern in 2021 to 2022, bringing the higher prices.

**2021 Injection Season Core Supply/Demand Fundamentals**



Source: EBW Analytics

**NYMEX April-October 2021 Futures on 03/06/2020, 11/11/2020, and EBW Most-Likely Scenario**



Source: Bloomberg, EBW Analytics



## SUMMARY

We last published an energy market spotlight in mid-March. At that time we warned of consequences that could arise in the natural gas market. EBW Analytics has taken the last 6 months and conveyed a plausible scenario in which a shortage of natural gas results in prices increasing to \$5.00/MMBtu. This scenario assumes over 8-10 BCF/D in LNG exports, a winter near the ten-year average, limited production growth of 2 BCF/D or less, and less electricity power burn demand than in 2020. Any combination of these fundamentals could produce varying degrees of pricing. The idea that COVID-19 has produced an irrational forward looking market for natural gas is a growing belief among analysts. Anyone heavily dependent upon natural gas and electricity should review their risk strategy at this time.