

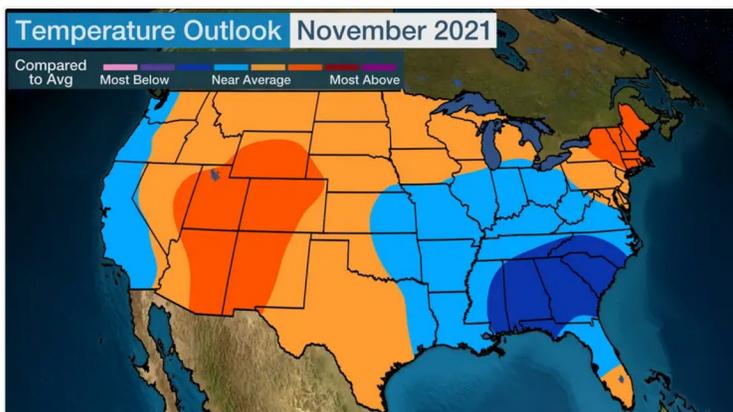
MARKET SUMMARY

BIGGEST FACTORS: MULTIPLE

Natural gas production and winter weather are key drivers. Concerns over supply and storage inventories could be mitigated if rising rig counts result in production increases and mild winter forecasts materialize.

WEATHER (BEARISH)

TAKEAWAY - Temperatures are falling, but heating season has been delayed relative to the 30-year norm, continuing a year-long trend of warmer temperatures. This has a bearish effect on pricing.



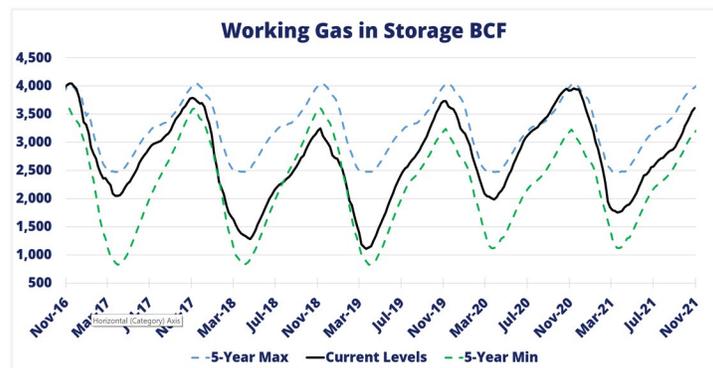
Source: The Weather Company

Above-average temperatures are favored across the South and most of the eastern U.S. as La Niña climate conditions have emerged for the second winter in a row.

NOAA's 2021 Winter Outlook calls for wetter-than-average conditions across portions of the Northern U.S. which may help with hydrogeneration capacity.

STORAGE (BEARISH)

TAKEAWAY - In a stark YoY turnaround, storage fields added ~70 Bcf compared to last year's 27 Bcf draw, with a forecast showing injections extending at least until mid-November.



Source: EIA

Gas storage is only 3.4% below the five-year average. Historically, injection rates have slowed as the winter season approaches.

PROCUREMENT TAKEAWAY

Recent natural gas price rallies may slow or possibly weaken for a brief period. Be ready to execute a short-term winter hedge quickly. Plan to reevaluate risk tolerance and procurement strategy in spring 2022.

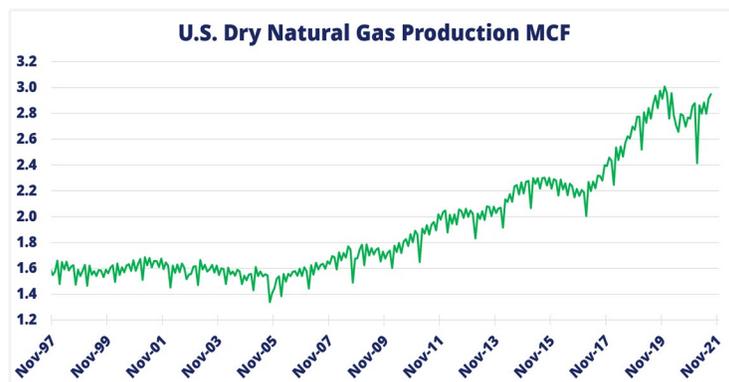
STORAGE (CONTINUED)

However, this year injections remain strong thanks to mild temperatures and lower demand. Inventories are likely to close the gap.

Aliso Canyon's maximum storage level has been raised 21% for winter reliability. This temporary increase will serve winter season heating

PRODUCTION (NEUTRAL)

TAKEAWAY - Gas supplies have rebounded to their highest level since Hurricane Ida in August, approaching near-record levels since Oct. 23.

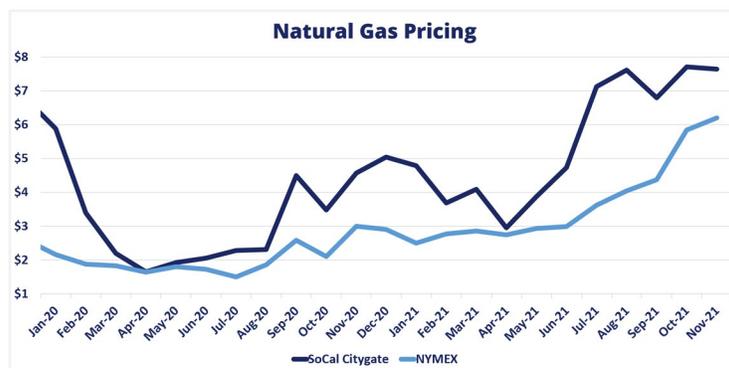


Source: EIA

Despite gains, more production is needed for prices to return to the historical range. Gas is being called on to replace other generation sources, like hydro and nuclear.

EIA reports gas consumption for power generation rose 3% in 2020. Low prices made gas a more competitive generation fuel, particularly compared with coal.

PRICING



Source: EIA



IN THE NEWS

Pipelines to Mexico and Canada and tankers traveling to Europe and Asia have moved record amounts of U.S. gas out of the country this year as parts of the world fall short of supplies. American frackers, meanwhile, are holding the line on new drilling as investors pressure them to maintain capital discipline and return money to shareholders. The result is that gas exports are pushing domestic prices higher.

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Despite international sanctions, Iran produced 8.4 trillion cubic feet (Tcf) of dry natural gas in 2019, making the country the world's third-largest dry natural gas producer after the U.S. and Russia. Natural gas production in Iran has grown steadily over the past two decades despite sanctions that affected Iran's energy exports, financial transactions, and imports of certain technologies. Iran's domestic natural gas demand, which the sanctions do not affect, has been the main driver of Iran's natural gas production growth.

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President Biden apologized for the U.S.' withdrawal from the Paris climate accord while addressing world leaders at the 2021 United Nations Climate Change Conference (COP26) in Glasgow, Scotland. While there, he issued a long-term plan to decarbonize the U.S. economy by 2050. The plan asks the electric sector to eliminate emissions by 2035 through transmission upgrades, energy efficiency, storage, and non-emitting generation. Several other strategies will be required, including carbon capture at power plants and technology to remove CO₂ from the atmosphere.

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The House has approved a \$1.2 trillion bipartisan infrastructure bill that includes about \$65 billion for grid infrastructure and \$50 billion for cyber and climate resilience over five years. Approved by the Senate in August, the bill now heads to President Joe Biden.

Utility and renewable energy trade groups heralded the bill's passage, saying it would help spur the shift towards emissions-free electricity through increased funding for transmission, hydrogen, and electric vehicles (EVs).