Gas Market Edge

Gas Market Insight

21 July 2021

Summer gas prices sizzle on tight supply-demand balance

From IHS Markit North America Gas

Key implications:

- North American gas market fundamentals support the strengthening of the winter 2021-22 NYMEX forward curve to $3.78/MMBtu. **We expect tight supply-demand balances to persist through 2021 and into 2022.**
- High global gas prices have lifted demand for US LNG exports, impacting injections into domestic storage. At this point in the storage injection season, natural gas inventories remain 150 Bcf below the five-year average injection rate and 318 Bcf less than last year's rate.
- Coal market tightness – and resulting high coal prices – will limit the scope for additional gas-to-coal switching this summer, even if gas prices rise further. **We expect coal prices to remain elevated throughout this winter and into 2022 as utilities look to refill dwindling stockpiles.**

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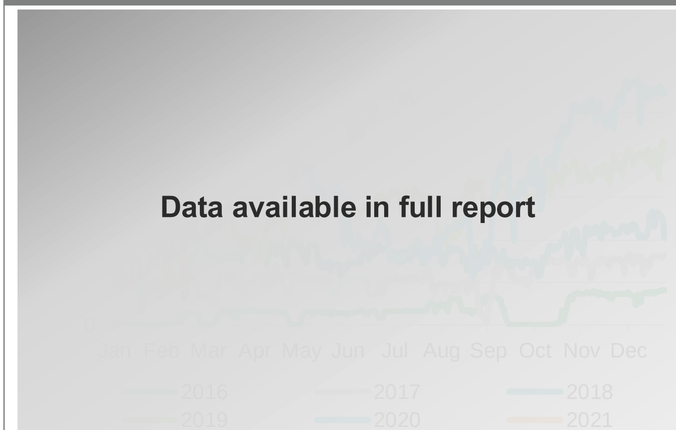
Inventories increasingly lag five-year average, pushing prices higher

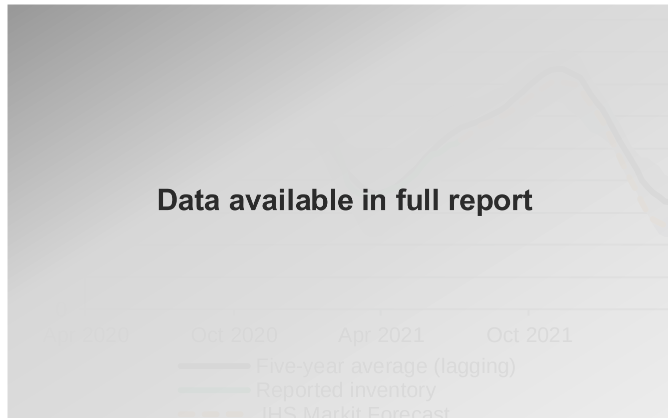
The risk of significantly higher year-over-year gas prices in 2021 remains acute. Natural gas demand has recovered to pre-pandemic levels. LNG liquefaction trains are running near full utilization, and when coupled with lagging production from the capital-disciplined E&P community, storage inventories are falling further below the five-year average.

US lower-48 LNG feed gas



Source: IHS Markit, PointLogic © 2021 IHS Markit

U.S. lower-48 storage inventory (Bcf)

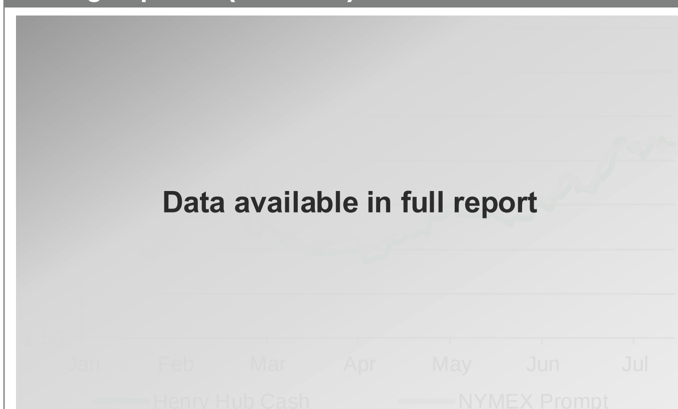


Source: IHS Markit, EIA © 2019 IHS Markit

Global gas prices remain elevated as well, with the Japan-Korea-Marker trading in the $13/MMBtu range. This in turn has supported strong US LNG exports, with feed gas in the 10 to 11 Bcf/d range thus far in July, more than 7 Bcf/d above year-ago levels.

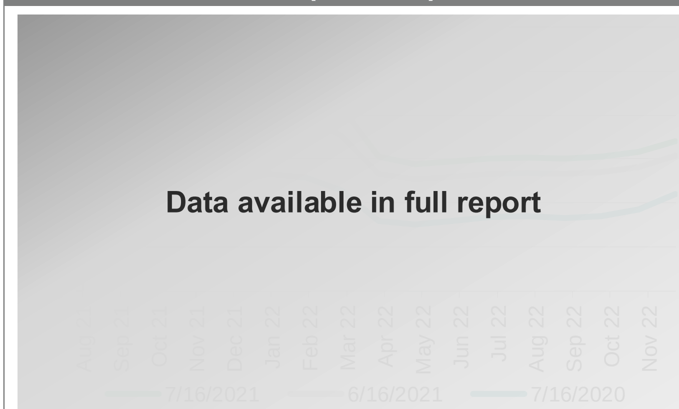
With more gas going overseas, less is going in the ground ahead of the winter heating season. US lower-48 storage injections have lagged the five-year average since the beginning of the summer injection season, and as of July 9 were 189 Bcf below the five-year average and 543 Bcf below last year. We expect that by the time the injection season ends in October, inventories will be roughly 200 Bcf below the five-year average and 400 Bcf below last year.

2021 gas prices ($/MMBtu)



Source: IHS Markit, Intelligence Press © 2021 IHS Markit

NYMEX forward curve ($/MMBtu)



Source: IHS Markit, CME Group © 2021 IHS Markit

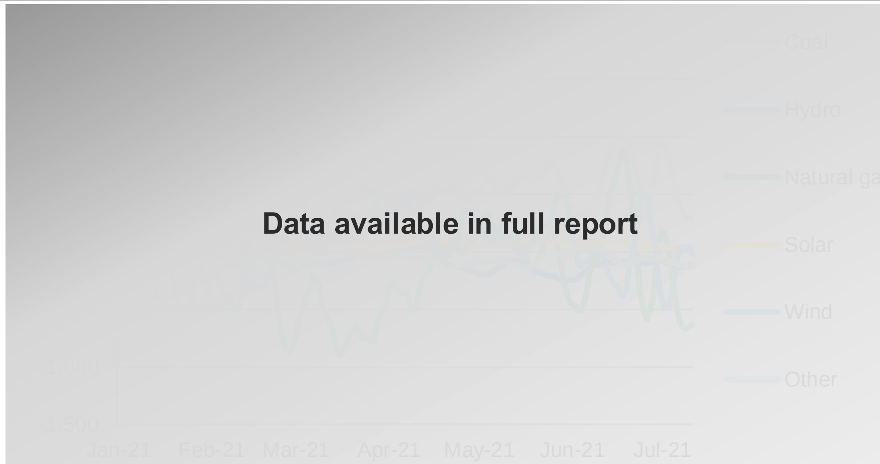
Both Henry Hub cash and NYMEX prompt prices have risen by more than $1/MMBtu since April, with prices increasingly reflecting winter supply concerns. The November 2021 to March 2022 average was $3.78/MMBtu on 16 July, an increase of $0.38/MMBtu in just one month and over $1.00/MMBtu above last year. This concern is warranted, as we do not expect a significant increase in natural gas production over the balance of 2021 and LNG exports should remain near full utilization. Any weather upside, in the form of either hotter-than-normal summer weather or earlier-than-normal cold in the autumn, would further reduce storage inventories.

Tight coal market could limit power sector gas-to-coal switching

Substantial year-over-year increases in natural gas prices have reduced gas burn in the power sector and allowed coal to regain market share. Barring a few weather-related events, natural gas burn has remained below year-ago levels since the beginning of 2021, while coal burn has exceeded 2020 levels.

Increased coal burn has depleted utility stocks and forward cover is expected to drop below 60 days this month—a level not seen since 2018. Moreover, thermal coal exports are up 35% through June over the same period of 2020, and we expect elevated seaborne prices and exports near current levels through the second half of 2021.

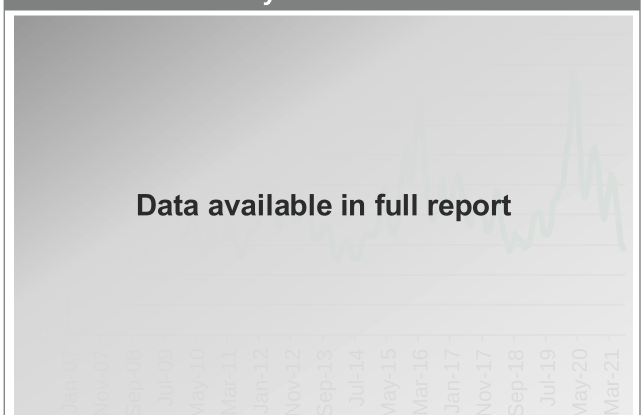
US lower-48 generation by source (7 day average year over year)



Notes: Other includes nuclear, petroleum, and anything not listed.
Source: IHS Markit © 2021 IHS Markit

Output is not likely to rise to levels that mitigate supply tightness. US coal production rebounded from a pandemic low of 116 MMst in the second quarter of 2020 to 140 MMst in the first quarter of 2021, and we estimate second-quarter production will rise to 151 MMst. But any additional production growth this year will be incremental, where labor, equipment, and transportation are available. Coal producers are unlikely to make the long-term capital expenditures commitments required to increase output to satisfy a short-term rise in demand.

US coal forward days cover



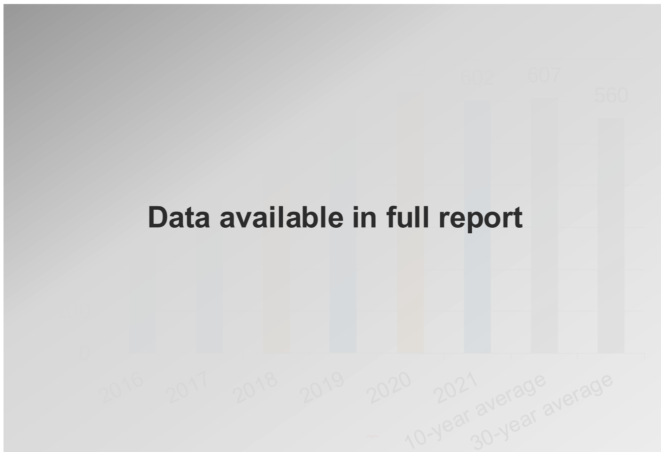
Source: IHS Markit, Energy Information Administration © 2021 IHS Markit

Market tightness will keep thermal coal prices elevated and support stronger gas burn in the power sector through the remainder of this year and into 2022. Limited production growth, steady export demand, and elevated utility consumption will eat away at electric utility coal stockpiles through 2022, forcing utilities to compete with the export market for limited spot market supply. Although stockpiles have not reached critically low levels, they are low enough to maintain upward pressure on prices, an effect that could intensify as they dwindle further through the summer and utilities look to restock in preparation for winter demand.

Not all weather is created equal

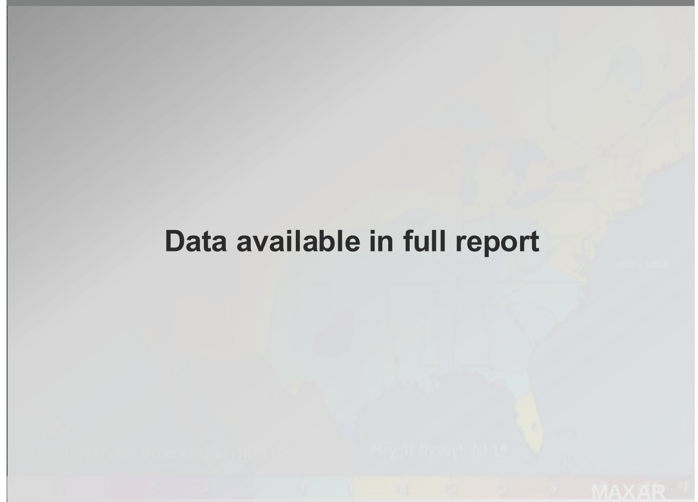
While much of the western half the continent has seen extreme heat this summer, the same cannot be said for the rest of the US lower 48. Texas, the Southeast, and the lower part of the Midwest have seen cooler-than-normal temperatures thus far during the summer. Population-weighted cooling degree days (CDDs) for the US lower 48 through July 19 were 1% below the 10-year average and 3% below last year.

Population-weighted CDDs tracker (1 May to 19 July)



Source: IHS Markit, Maxar

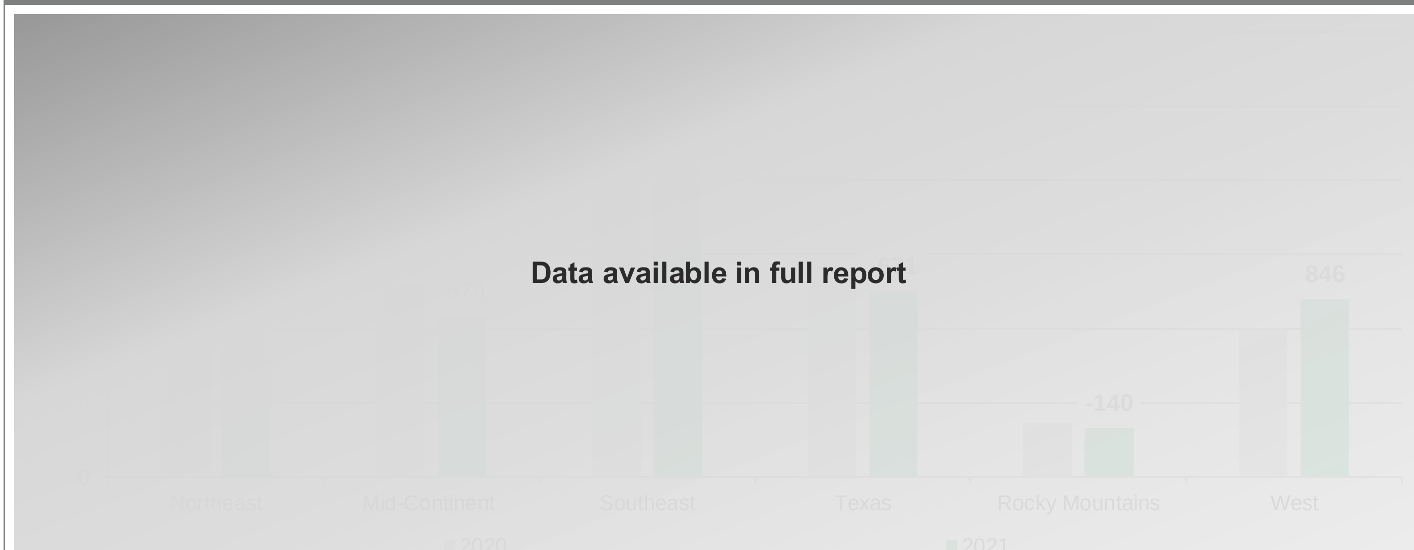
Average temperature departure from normal



Source: IHS Markit, Maxar

Gas burn in the power sector summer-to-date has averaged 2 Bcf/d below last year, down in all regions except the West, owing to above-normal temperatures there. Though below 2020 levels, gas burn has been surprisingly robust given gas price levels, highlighting the degree to which coal market tightness, along with coal plant retirements over the past decade, are keeping gas generation in the mix.

May to present power sector gas burn (MMcf/d)



Source: IHS Markit, PointLogic

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