



Natural Gas Market Indicators

Market Summary

•The first two weeks of 2022 have been cold across most of the US compared with December. Despite a respite from the cold as of publication, most forecasters expect the second half of January to be decidedly colder than the rest of the heating season so far.

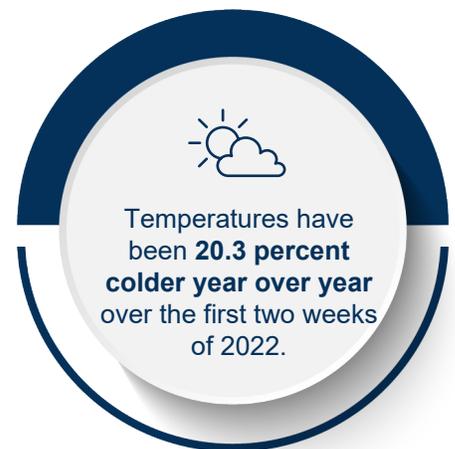
- Relatively low natural gas demand in December has turned a 3 percent deficit in storage compared to the five-year average into a 2.4 percent surplus as of January 13.
- 2021 saw record levels of US LNG exports, averaging 9.8 Bcf per day. As Europe and China bolster their receiving capacity to reduce their dependence on spot market gas and the US increases its exporting capacity, the EIA expects US daily LNG exports to increase to 11.5 Bcf per day in 2022.



\$
Future prices are trading above **\$4.00 per MMBtu** through February 2023



EIA forecasts 2022 dry production to average **96 Bcf per day**.



Temperatures have been **20.3 percent colder year over year** over the first two weeks of 2022.

Weather

The start of 2022 saw relatively cold temperatures settle across the US. For the week ending January 6, 2022, the US saw a 20.3 percent drop in temperatures year over year as measured by cumulative heating degree days, levels of which were equal to the US 30-year normal. The coldest conditions were measured in East North Central, which saw temperatures 41.2 percent colder than in 2021, and 15 percent colder than normal. The latter part of the second week of January saw a respite from the cold temperatures as temperatures across the US saw highs ranging from the 40s to the 70s. Still, most models expect temperatures to drop once again over the weekend of January 15, particularly across the northern US. Weather forecasters are expecting the second half of January to be the coldest two weeks of the winter so far. In particular, NatGasWeather is expecting temperatures to be cold enough to result in freeze-offs at the wellheads.

Demand

Total US daily demand jumped from 103 Bcf per day on December 31, 2021, to 139 Bcf per day on January 6, 2022. It wasn't long ago that a demand spike that high would have been a record for the US. However, today additional consumption from domestic end uses, including industrial and power sector requirements, and the growing contribution to exports, means demand will have to push into the 150 Bcf per day range to break records again. The high demand over the first two weeks of January represents an 8 percent increase year over year. On January 6, about 13 percent of total demand was directed to export markets. Looking ahead, colder temperatures are set to return, and total US demand will once again rise above 130 Bcf per day by mid-month, according to S&P Global Platts Analytics forecast (1/13/2022).

Natural Gas Production

US natural gas production climbed above 96 Bcf per day briefly as 2021 came to a close. However, the New Year brought colder temperatures and a production drop due to freezing temperatures in the Permian and declines in other supply basins, and a typical beginning-of-the-year production pullback. Lower-48 dry gas flows dropped to 91.4 Bcf per day by January 2, 2022, and partially rebounded as temperatures eased. However, aggregate production remains below the recent highs, with current flows between 92 and 93 Bcf per day. Despite some production constraints during the shoulder seasons attributed to deferred maintenance, according to the EIA's short-term energy outlook (STEO), US dry natural gas production averaged 93.5 Bcf per day, a 2 percent increase over 2020. The EIA expects dry gas production to accelerate in 2022 and 2023, forecasting production to rise to 96 Bcf per day in 2022 and 97.6 Bcf per day in 2023.

Rig Count

The number of gas rigs in operation sits at 109, nearly 28 percent above year-ago levels. Similarly, oil-directed rigs are up 71 percent from year-ago levels. As of January 14, the total number of working domestic rotary rigs in operation is 601, the highest number since the first week of April 2020.

Pipeline Imports and Exports

Gas volumes from Canada have averaged 5.9 Bcf per day over the first two weeks of January. However, the average was closer to 6.2 Bcf per day over the second week of January as temperatures across the lower 48, particularly in the north and northeast, turned colder. Meanwhile, gas exports to Mexico have averaged 5.5 Bcf per day over the first two weeks of January.

LNG Markets

According to Bloomberg New Energy Finance, China signed a record 21 sales and purchasing agreements in 2021. The record number of sales and purchasing agreements signed last year will total 24.4 million tonnes per year (3.25 Bcf per day) in LNG volumes, of which the US will be the largest supplier, followed by Qatar. These actions could lessen China's dependence on spot gas purchases. However, the gap between total import capacity and contracted gas supplies may widen as BNEF expects China to add the most LNG receiving capacity in the world in 2022. Back at home, LNG export feedgas flows have averaged 12.2 Bcf per day month to date in January, a growth of 12 percent above 2021. LNG feedgas accounts for nearly 10 percent of total US demand so far in January. The STEO estimates that US LNG exports averaged 9.8 Bcf per day in 2021, a 51 percent increase from 2020. However, LNG exports ramped up towards the end of the year, so the average over the last six months of 2021 surpassed 10 Bcf per day. As US export capacity increases over the coming months and years, the EIA expects US LNG exports to average 11.5 Bcf per day in 2022 and 12.1 Bcf per day in 2023. US LNG daily exports will have nearly doubled over three years if those forecasts come true. On a daily basis, pipeline feedgas to LNG export facilities hit 13.2 Bcf on January 16, the highest level ever.

Underground Storage

Relatively low demand in December resulted in small withdrawals from storage. On December 13, 2021, storage levels were at 3,505 Bcf, 2.5 percent below the five-year average. Draws since then totaled only 489 Bcf (as a point of comparison, withdrawals over the same period were 565 Bcf in 2021). As a result, as of January 13, working gas in underground storage is now 2.4 percent above the five-year average.

Reported Prices

Expectations of colder temperatures and recent production declines contributed to a Henry Hub rally that pushed front-month contracts to \$4.86 per MMBtu on January 12, the highest prices since November 30, 2021. However, by closing on January 13, prices had dropped over 12 percent as some weather models tempered cold weather expectations. Despite substantial drops in future prices over the past two months, future prices remain above \$4.00 per MMBtu through February 2023. The relatively small withdrawals from storage in December may have kept significant increases in spot prices at bay, despite the cold weather in early January. On January 18, Henry Hub spot prices traded at \$4.29 per MMBtu. The latest STEO is forecasting Henry Hub spot prices to average \$3.82 per MMBtu in the first quarter of 2022 and \$3.79 for all 2022, representing a 3 percent decrease from the 2021 Henry Hub spot price average of \$3.91 per MMBtu.

Please direct questions to Richard Meyer at rmeyer@aga.org or Juan Alvarado at jalvarado@aga.org. If you would like to add someone to the bi-monthly distribution list for this report, please notify Lucy Castaneda-Land at lcastaneda-land@aga.org

Notice

In issuing and making this publication available, AGA is not undertaking to render professional or other services for or on behalf of any person or entity. Nor is AGA undertaking to perform any duty owed by any person or entity to someone else. Anyone using this document should rely on his or her own independent judgment or, as appropriate, seek the advice of a competent professional in determining the exercise of reasonable care in any given circumstances. The statements in this publication are for general information and represent an unaudited compilation of statistical information that could contain coding or processing errors. AGA makes no warranties, express or implied, nor representations about the accuracy of the information in the publication or its appropriateness for any given purpose or situation. This publication shall not be construed as including, advice, guidance, or recommendations to take, or not to take, any actions or decisions any matter, including without limitation relating to investments or the purchase or sale of any securities, shares or other assets of any kind. Should you take any such action or decision; you do so at your own risk. Information on the topics covered by this publication may be available from other sources, which the user may wish to consult for additional views or information not covered by this publication.