

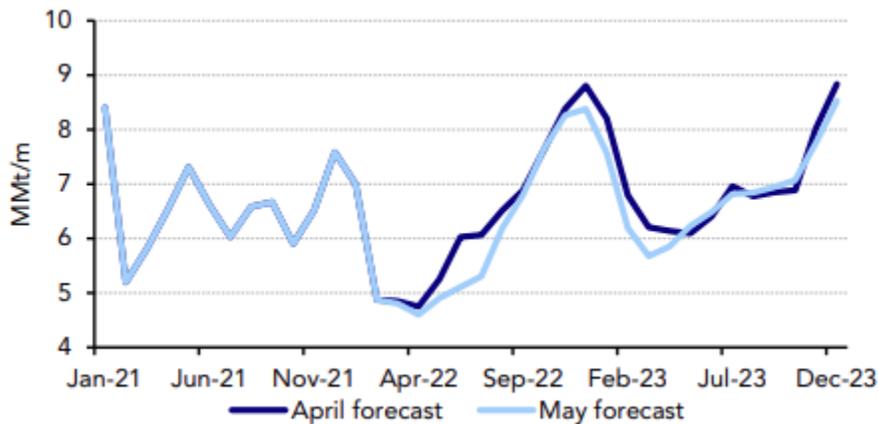


LNG Market Outlook

LNG being replaced by other sources in China

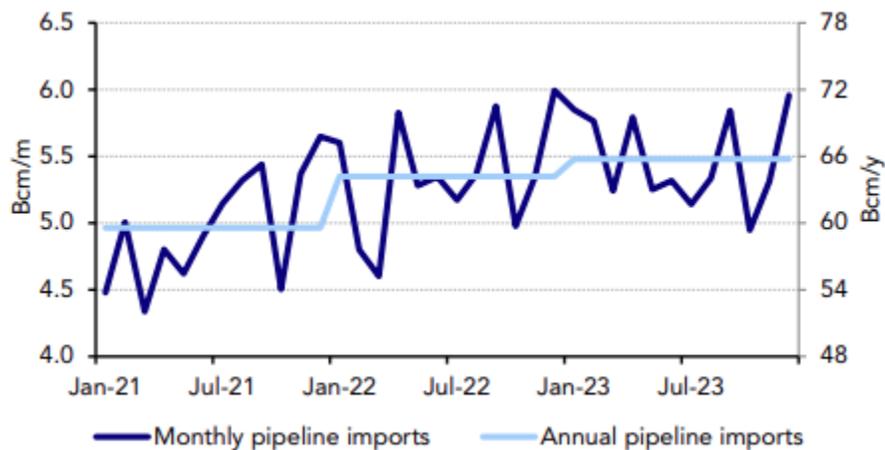
LNG imports for China are down 21% from January to May of this year compared to last year over the same period. Higher pipeline imports, higher domestic natural gas production, higher coal consumption and production, and high LNG prices and a slowing economy are all contributing to the decline. Coal consumption in the power sector from January through April is up 25% compared to the same time frame in 2020 while coal production is up about 12% compared to last year.

China LNG import forecast comparison



Power producers with both gas-fired and coal-fired generation are maximizing the coal portion. The switch to coal makes economic sense due to high natural gas import prices and lower domestic coal prices. Coal prices are lower because of price caps for thermal coal and higher domestic coal production.

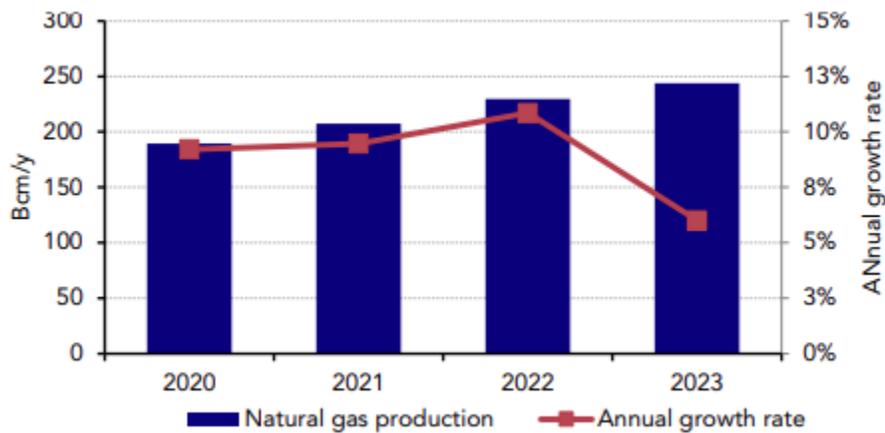
China natural gas pipeline import forecast



The Chinese government recently announced plans to spend \$1.5 billion on increasing coal fired generation to avoid power cuts, and to spend another \$15 billion on raising coal output. Given all these factors, the LNG import forecast has been lowered to 74 MMt/y in 2022 from the previous forecast of 77 MMt/y. In 2023, imports are forecast to grow by 11% to 82 MMt/y.

Pipeline imports from Russia through the Power of Siberia pipeline are up 60% this year. Gazprom sent roughly 9 Bcm through the Power of Siberia pipeline to China in 2021 and has stated that they plan to increase flows to 14 Bcm in 2022 – only about 40% of the pipe’s total capacity. Pipeline gas imports from Myanmar and Central Asia are also anticipated to increase. However, pipelines running through Myanmar have been targets of anti-Chinese civilian militias in Myanmar. Pipeline gas imports are forecast to climb by 7% from 59 Bcm/y in 2021 to 64 Bcm/y in 2022 and 3% to roughly 66 Bcm/y in 2023.

China natural gas production forecast and growth rate



Through 1Q 2022, domestic natural gas production was up 5% at 58.5 bcm compared to 1Q 2021. Higher prices are encouraging domestic producers to increase production, and production has exceeded production targets set by the Chinese government. This trend is China LNG import forecast comparison China natural gas production forecast and growth rate China natural gas pipeline import forecast forecast to continue throughout 2022 and 2023 with domestic production reaching 230 Bcm/y in 2022 – up 11% from 2021 and roughly 16 Bcm higher than current production targets