What's Hot: Record US temperatures could drive natural gas demand higher

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Key Takeaways

- Swathes of the US are suffering from a heatwave and air conditioning demand is rising.
- New England saw an uptick in electricity and natural gas demand as a result of extreme heat.
- As the heat wave spreads, we expect more demand for natural gas.
- LNG shut-in risks have fallen as Storm Alberto has been downgraded to a depression, reducing the prospect of natural gas gluts forming.
- Weather extremes are getting more common and prolonged, and so we should expect more of these events to come.

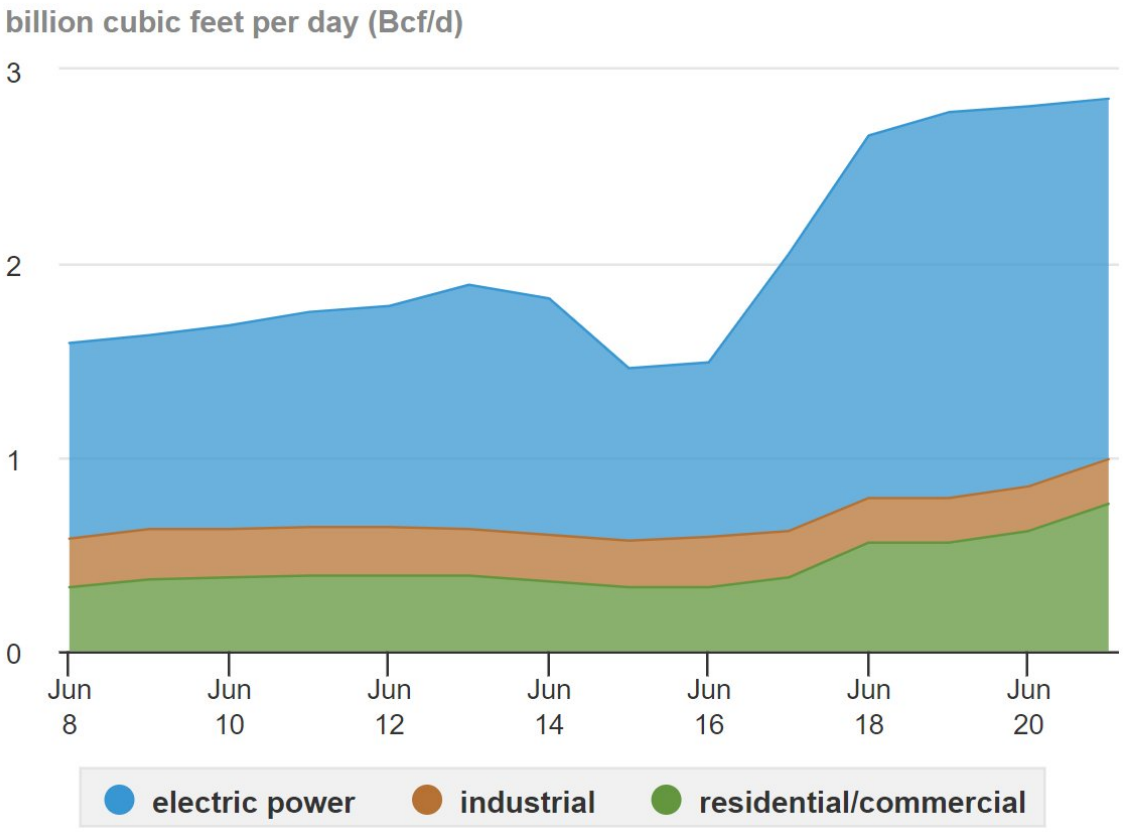
Record temperatures hit the North East

The United States continues to suffer extreme weather as a heatwave baked millions across the upper Midwest and north-east and a tropical storm soaked Texas and northern Mexico.

The National Weather Service said the heatwave was expected to peak in the eastern Great Lakes, New England, the Ohio Valley and mid-Atlantic over the weekend of 22-23 June.

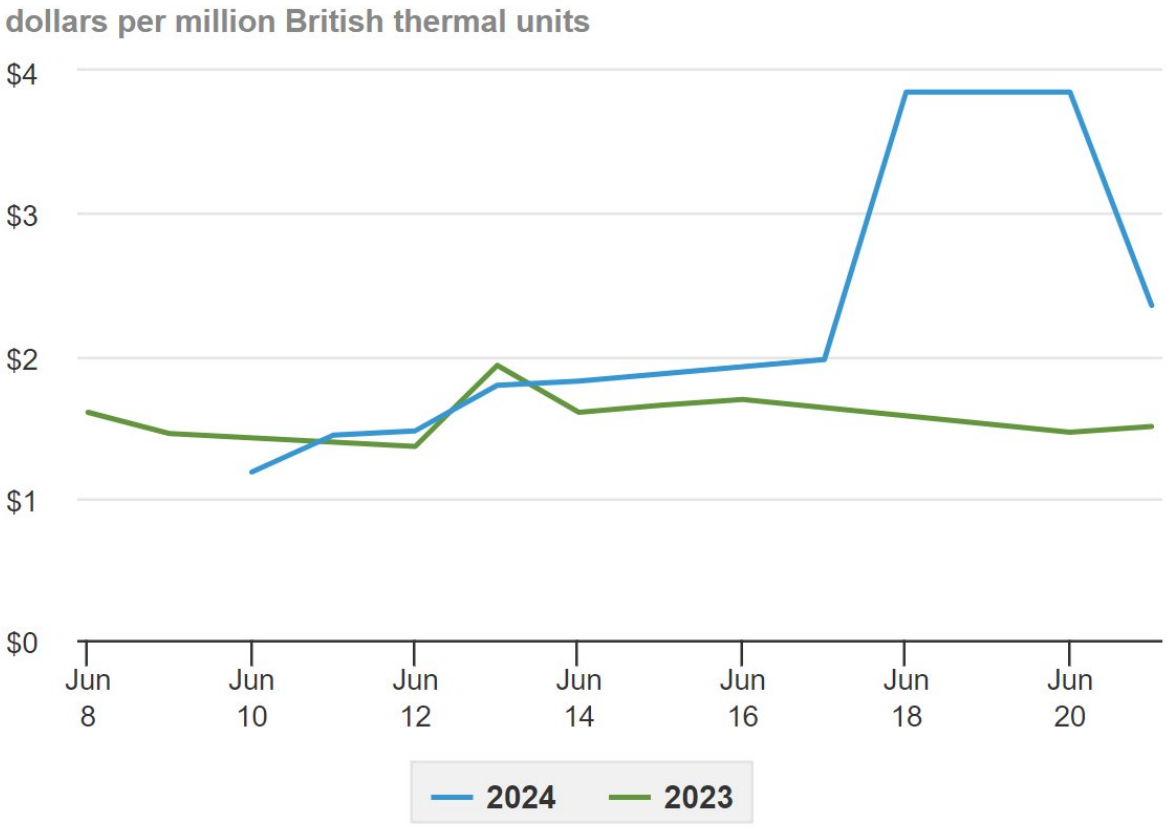
Air conditioners use electricity and 43% of US electricity is generated from natural gas[1]. New England gas demand increased by more than 50% between Sunday 16th and Thursday 20th June (Chart 1). Over that period spot natural gas prices for the region doubled (Chart 2).

Chart 1: Natural gas consumption in New England



Source: Energy Information Agency, 21 June 2024. **Historical performance is not an indication of future performance and any investments may go down in value.**

Chart 2: Spot price of natural gas in New England



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Heatwave spreading

As the heatwave moves south and inwards, afternoon high temperatures and warm overnight lows will challenge and exceed daily records for many locations in the Ohio Valley eastward. Heat index readings are expected to peak from 100°F to 105°F in many locations, and Heat Advisories are in effect from Ohio to New Jersey.

Keep air conditioners blowing

The National Weather Service advised “those without access to reliable air conditioning are urged to find a way to cool down as very warm overnight temperatures (only in the 70°Fs) will prevent natural cooling and allow the heat danger to build over time indoors without air conditioning”. In short, they have advised those with air conditioning to keep it on! We thus expect a surge in natural gas demand from the moving heatwave. That in turn should drive natural gas as an energy source for power generation higher.

Although cooler air will filter into northern New England behind a slowly-moving cold front, temperatures south of the boundary will soar into the weekend. These temperatures may be the highest observed in several years for some locations. In much of the West (West Coast and Great Basin/Desert Southwest), temperatures will continue to heat up each day with 90°F s and 100°F s. Some daily record highs may be challenged in Northern California into Oregon.

Heat stress to crops could also follow. The United States Department of Agriculture is expecting topsoil moisture declines due to dry heat.[2]

Shut-in risk reduced

In the Gulf of Mexico, tropical storm Alberto (the first named storm of the season) has been downgraded to a depression. While wind and flooding affected southern Texas, the Bureau of Safety and Environmental Enforcement has not reported any oil or natural gas liquification plant closures.

Often hurricane activity can force closures, shutting in natural gas and thus increasing supply. The avoidance of this risk this time, reduces a potential weight on gas prices.

Conclusion

Weather risks continue to drive volatility and price spikes in certain commodities. We expect tactical upside potential for US natural gas. Interestingly a study in Sciences Advances[3] concludes since 1979, global heat waves are moving 20% more slowly — meaning more people stay hot longer — and they are happening 67% more often. The study found the highest temperatures in the heat waves are warmer than 40 years ago and the area under a heat dome is larger. We should expect weather related volatility as a result.

1 Source: Energy Information Agency, 2023
2 https://www.usda.gov/media/radio/daily-newsline/2024-06-20/topsoil-moisture-declines-due-dry-heat
3 https://www.science.org/doi/10.1126/sciadv.adl1598

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