What's Hot: Europe's record heatwave: Climate, cooling and commodity impacts

Published 4 July 2025

Nitesh Shah
Head of Commodities and Macroeconomic Research, WisdomTree Europe

Key Takeaways

- Europe faced a record-breaking heatwave, sparking deadly wildfires and straining energy infrastructure.
- Soaring cooling demand has driven electricity consumption and increased reliance on gas and solar, with risks from future cloud cover.
- Power and commodity markets reacted sharply, with bullish signals for natural gas and EU carbon allowances due to higher energy needs and emissions.

Over the past week, Europe has endured an intense and widespread heatwave, bringing record-breaking temperatures, raging wildfires, and significant disruptions to everyday life. The event has not only underscored the tangible effects of climate change but also triggered notable movements in energy demand and commodity markets.

Record-Breaking Temperatures Across the Continent

Several European countries experienced historic temperature spikes in late June. In Portugal, the city of Mora reached a record-breaking 46.6°C—the highest June temperature ever recorded in the country. Spain saw similar extremes, with El Granado hitting 46.0°C and Barcelona marking its hottest June since 1914 at 37.9°C. France faced near 40°C heat, prompting red alerts, the closure of over 1,300 schools, and even the temporary shutdown of the Eiffel Tower's summit. Italy issued high heat alerts for cities like Rome and Florence, where temperatures climbed to 38°C, and heat-related incidents led to several fatalities, including a worker in Bologna. Meanwhile, the UK recorded its hottest June since 1884, with Charlwood in Surrey reaching 33.2°C on June 21.

Wildfires and Emergency Evacuations

The extreme heat and dry conditions triggered severe wildfires across multiple regions. In Turkey's 0zmir Province, fires forced the evacuation of over 50,000 residents and caused widespread damage to farmland, homes, and forests. In Spain, wildfires in Catalonia led to two fatalities, fuelled by parched vegetation and prolonged high temperatures. France also faced significant fire activity in the Corbières region, where

flames prompted highway closures and mass evacuations as emergency crews worked to contain the blazes.

Cooling Demand and Power Stress

The scorching heat drove a sharp increase in air conditioning (AC) usage, particularly in southern and eastern Europe. This has led to:

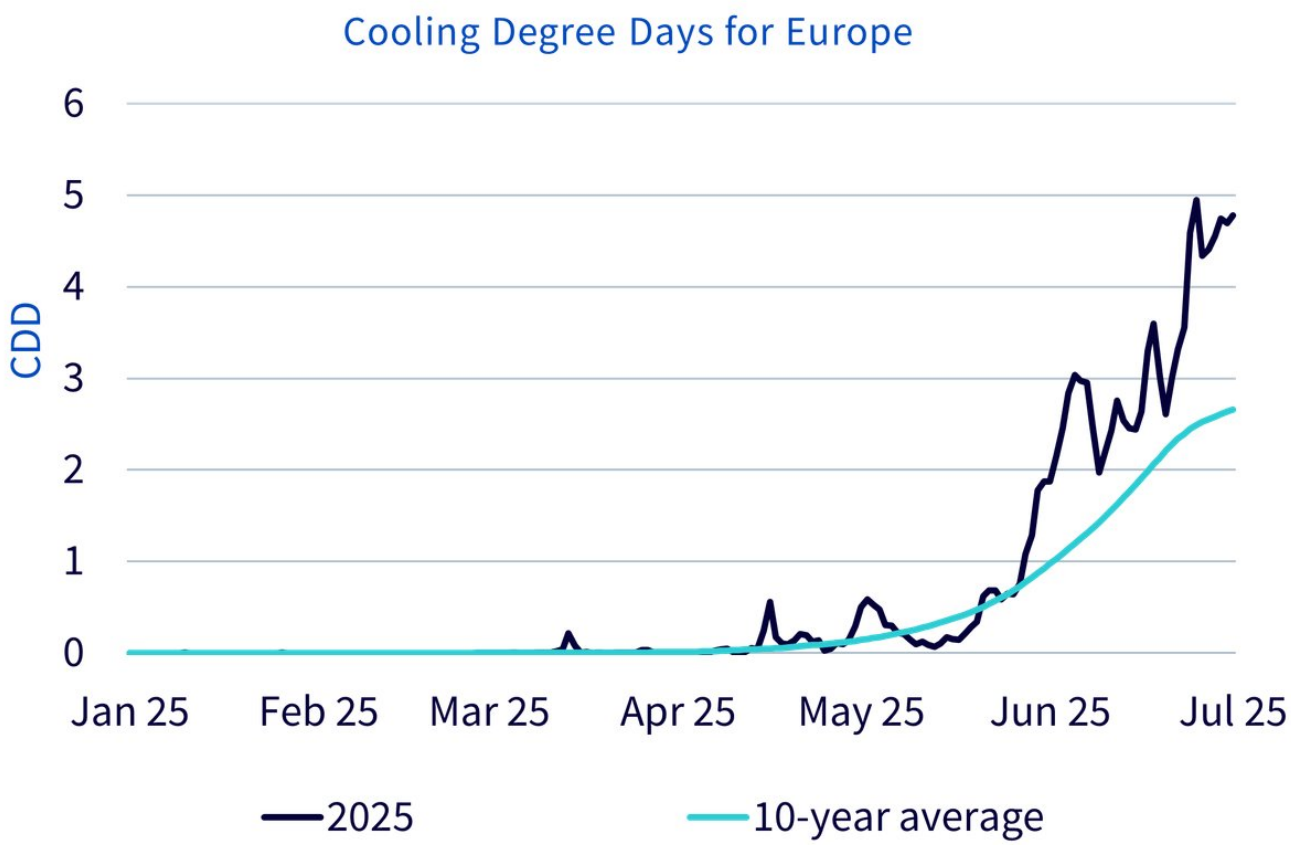
- Power surges across Italy, France, and the Balkans, with grid operators reporting record electricity demand.
- Concerns over energy infrastructure, especially in areas already experiencing aging or strained networks.

Cooling Degree Days (CDDs)

To quantify the demand for cooling, analysts monitor Cooling Degree Days (CDDs). CDDs measure how much—and for how long—outside temperatures exceed a base comfort level of 22°C.

- For example, if the average temperature for a day is 26°C, that’s 4 CDDs.
- The more CDDs accumulate, the higher the demand for cooling energy.

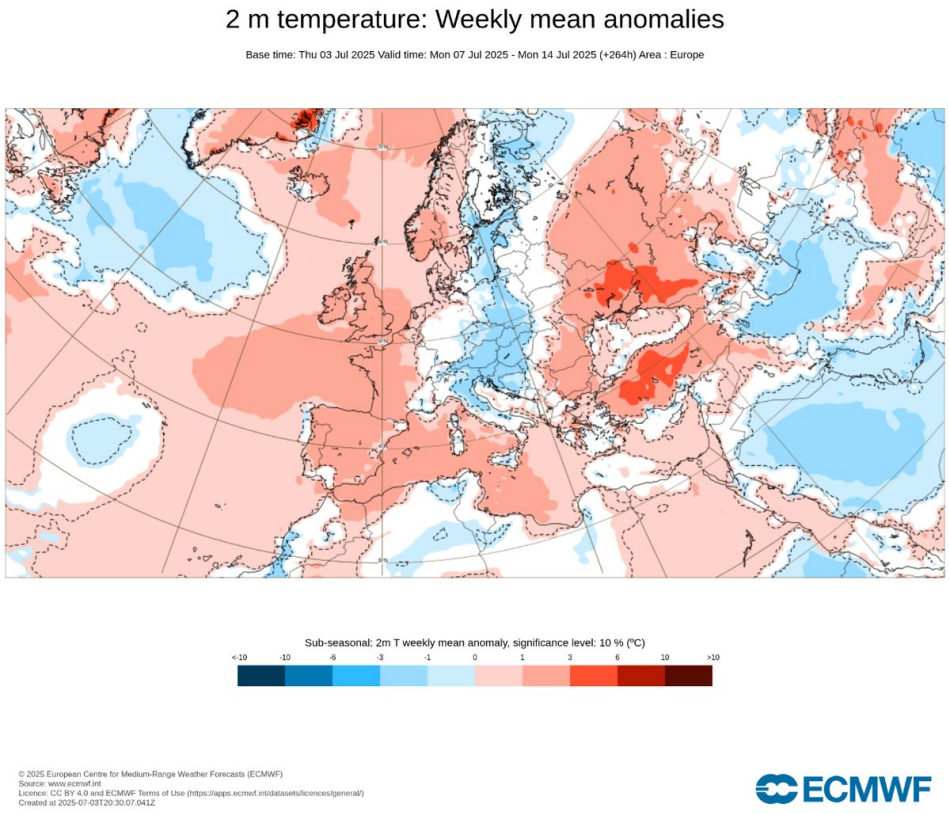
In the past month, European CDDs have surged well above their 10-year average, reflecting the intensity of the heatwave and the resulting pressure on power demand.



Source: Bloomberg New Energy Finance, European Centre for Medium-Range Weather Forecasts (ECMWF), 3 July 2025.
Historical performance is not an indication of future performance and any investments may go down in value.

What's Next? Anomalies and Energy Implications

Looking at temperature anomaly forecasts (i.e. deviations from normal seasonal temperatures), the southern part of the continent is expected to remain hotter than average over the coming week).



Source: European Centre for Medium-Range Weather Forecasts (ECMWF). Taken on 4 July 2025. Forecast Range 7-14 July 2025. Expected deviation from mean seasonal temperatures based on a 10% significance level. **Forecasts are not an indicator of future performance and any investments are subject to risks and uncertainties.**

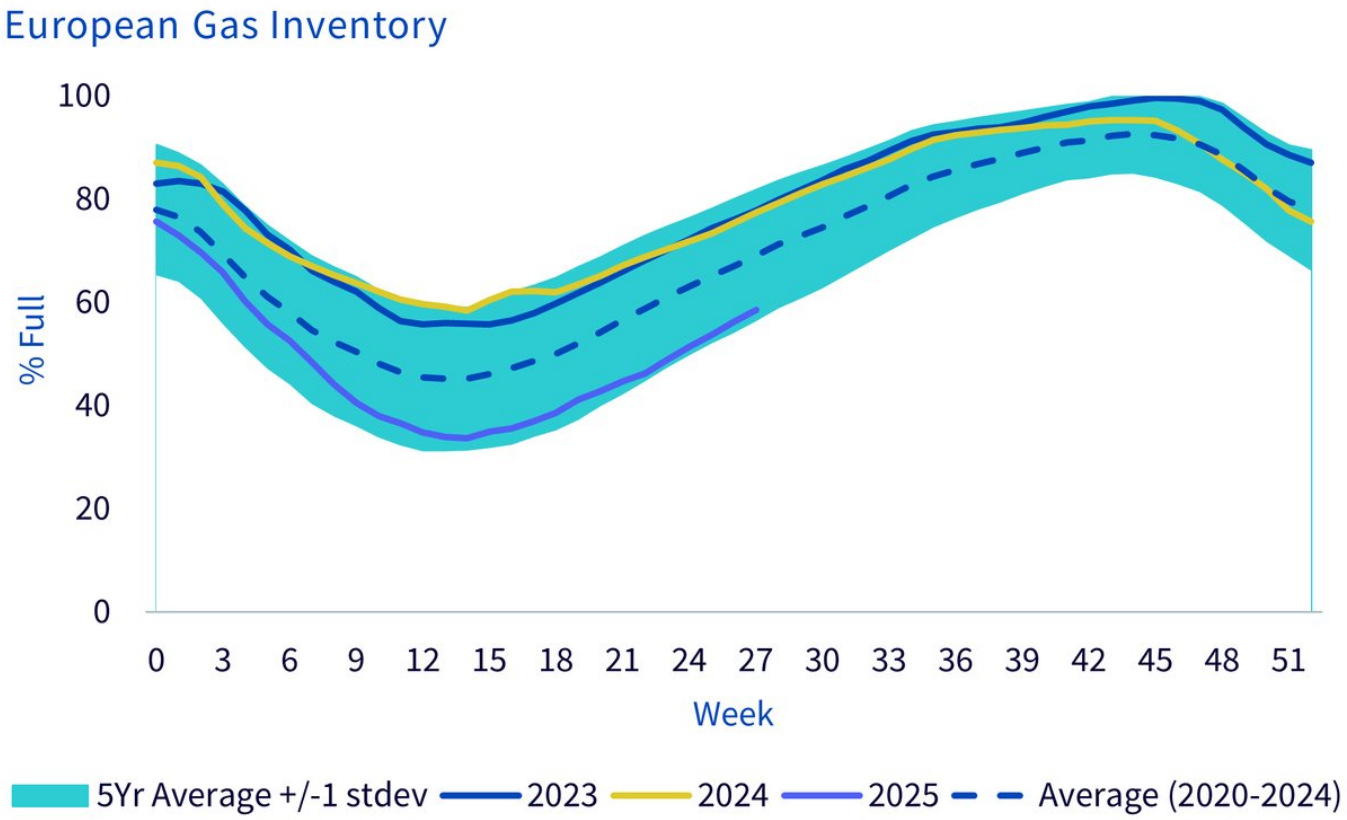
This suggests that elevated power demand may persist in the short term, with several important implications for energy and commodity markets:

1. European Natural Gas (TTF)

Bullish near-term outlook: Rising AC usage boosts gas-fired power generation.

Renewed demand for gas as a flexible backup to intermittent renewables.

Storage of European natural gas is below seasonal average, and more importantly, significantly below the post-2022 era when reliance on storage has increased with the absence of pipeline gas flows from Russia.



Source: WisdomTree, Bloomberg. January 2019 – June 2025. **Historical performance is not an indication of future performance and any investments may go down in value.**

2. Solar vs. Cloud Cover Dynamics

The intense sunlight has improved solar power output, helping meet peak cooling loads.

But rising Mediterranean Sea temperatures may enhance storm activity and cloud cover, which could reduce solar generation.

In such scenarios, natural gas and coal may play a larger role.

3. Carbon Market (EUAs)

Any switch to gas raises demand for European Union Allowances (EUAs) due to emissions.

A switch to coal intensifies EUA demand even further, given its higher carbon intensity.

Final Thoughts

Europe's recent heatwave offers a vivid preview of how climate volatility, energy consumption, and commodity markets are becoming increasingly intertwined. As temperatures rise, so too does the urgency for both climate adaptation and energy system resilience.

We’ll be watching weather anomalies, power demand data, and carbon pricing closely as these dynamics continue to evolve in the weeks ahead.

Important Risks Related to this Article

Important Information

Marketing communications issued in the European Economic Area ("EEA"): This document has been issued and approved by WisdomTree Ireland Limited, which is authorised and regulated by the Central Bank of Ireland.

Marketing communications issued in jurisdictions outside of the EEA: This document has been issued and approved by WisdomTree UK Limited, which is authorised and regulated by the United Kingdom Financial Conduct Authority.

WisdomTree Ireland Limited and WisdomTree UK Limited are each referred to as "WisdomTree" (as applicable). Our Conflicts of Interest Policy and Inventory are available on request.

For professional clients only. The information contained in this document is for your general information only and is neither an offer for sale nor a solicitation of an offer to buy securities or shares. This document should not be used as the basis for any investment decision. Investments may go up or down in value and you may lose some or all of the amount invested. Past performance is not necessarily a guide to future performance. Any decision to invest should be based on the information contained in the appropriate prospectus and affer seeking independent investment, tax and legal advice.

The application of regulations and tax laws can offen lead to a number of different interpretations. Any views or opinions expressed in this communication represent the views of WisdomTree and should not be construed as regulatory, tax or legal advice. WisdomTree makes no warranty or representation as to the accuracy of any of the views or opinions expressed in this communication. Any decision to invest should be based on the information contained in the appropriate prospectus and affer seeking independent investment, tax and legal advice.

This document is not, and under no circumstances is to be construed as, an advertisement or any other step in furtherance of a public offering of shares or securities in the United States or any province or territory thereof. Neither this document nor any copy hereof should be taken, transmitted or distributed (directly or indirectly) into the United States.

Although WisdomTree endeavours to ensure the accuracy of the content in this document, WisdomTree does not warrant or guarantee its accuracy or correctness. Where WisdomTree has expressed its own opinions related to product or market activity, these views may change. Neither WisdomTree, nor any affiliate, nor any of their respective officers, directors, partners, or employees accepts any liability whatsoever for any direct or consequential loss arising from any use of this document or its contents.