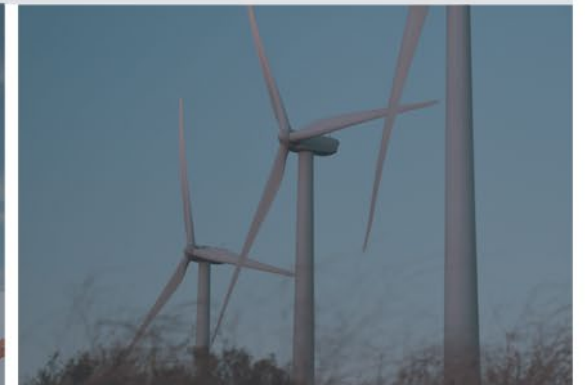


GB Power Market Outlook to 2030



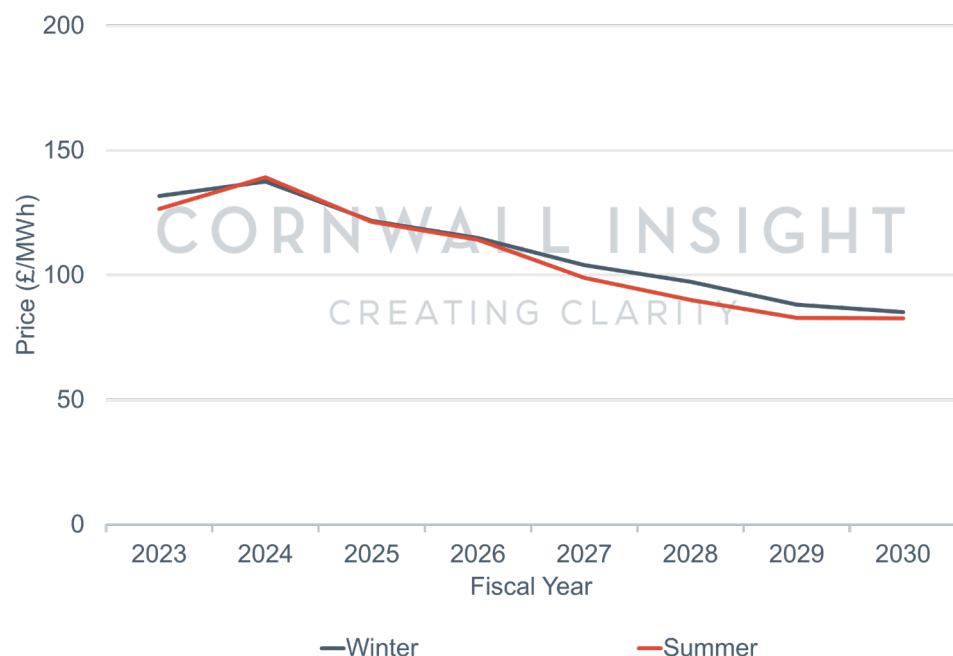
Q2 2023



GB Power Market Outlook to 2030

This report provides an annual overview of trends for the GB Power Market out to 2030 using outputs from Cornwall Insight’s latest Benchmark Power Curve (BPC) for the British Electricity Market covering England, Scotland and Wales. This publication is based on comprehensive market and asset-level power price modelling that delivers long-term power price forecasts, informed by industry-leading regulatory, market and policy expertise, and supplemented with direct access to trusted practitioners. All numbers/ figures are based on Cornwall Insight modelling except where explicitly referenced.

Figure 1: Power price forecasts - average price per fiscal year



Source Cornwall Insight Benchmark Power Curve

Key Drivers

- Power prices are high in the short term due to the high expected gas prices and a need for gas-fired generation to ensure supply. Natural gas prices have reduced from previous highs but remain elevated as Europe depends more on international LNG to replace Russian gas.
- Prices drop in the mid-2020s as higher marginal cost fuelled technologies are displaced by new renewables including new offshore turbines to meet the government’s 2030 wind generation target. The low marginal cost of wind turbines means that when they are generating, prices tend to fall.
- As we approach 2030, the deployment of low marginal cost generators is met by demand growth from the electrification of the economy, increasing production of green hydrogen and increased power exports to Europe, resulting in a levelling of prices above pre-pandemic levels.
- Compared to our last report:
 - Increased solar build-out contributes to driving the summer power prices down.
 - Decreased interconnector imports from Norway puts an upward pressure on the power prices, however this is counteracted by decreased exports to France with a downward pressure. This results in decreased power prices in the late 2020s.
- For information up to 2050 and more in-depth analysis, our **GB Benchmark Power Curve Report** is available.

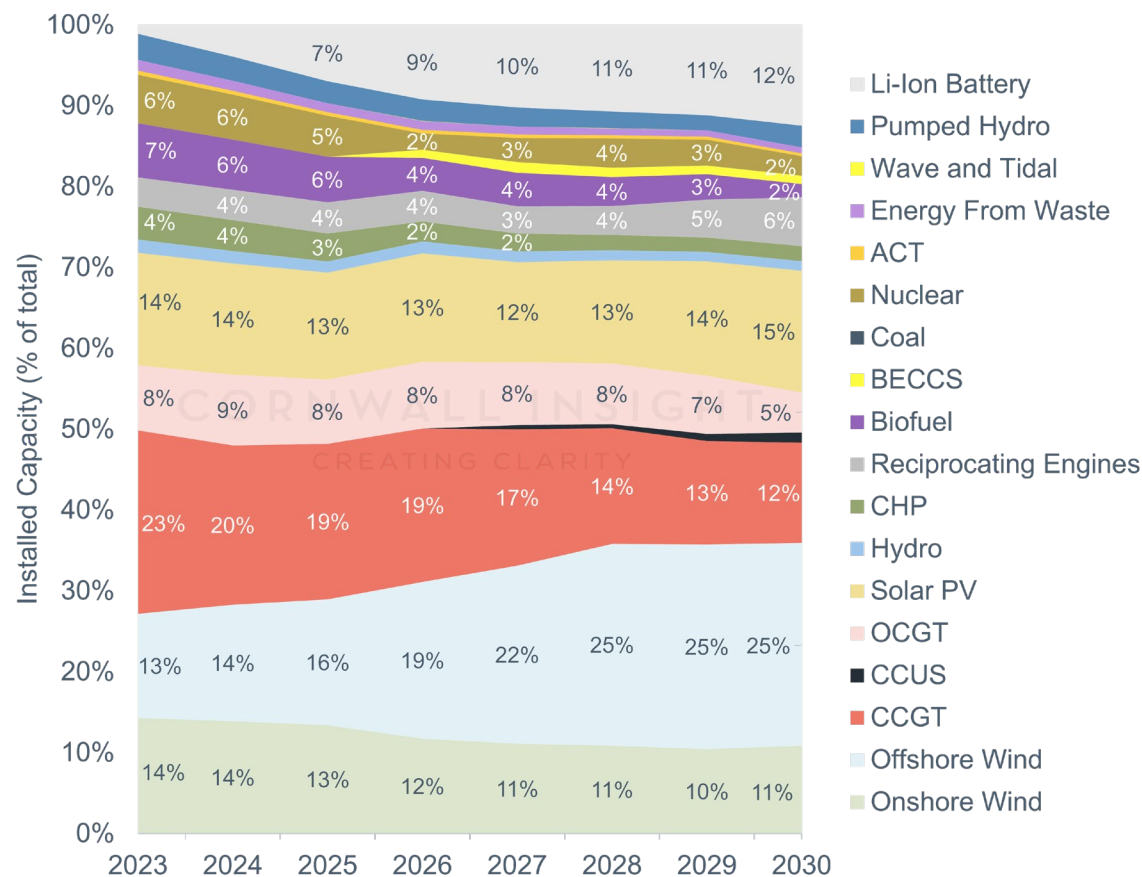
Generation Technology Mix

Underlying the forecast changes in power prices are the significant changes to the technological make-up of the system.

- No coal is expected to be online in 2023-2024 and all coal capacity is due to close by April 2024, in line with the government targets and increasing carbon prices playing a significant role in accelerating their decline.
- DESNZ have proposed an annual emissions limit of 350gCO₂/kWh for all existing plant in the Capacity Market and 100gCO₂/kWh for new build capacity from 2034-35. This has incentivised conversion of aging CCGT plants into OCGT plants with decreased emissions. OCGTs are also cheaper to maintain and run. Compared to previous report more CCGTs stay online until 2030.
- In the long term some new build CCGTs stay online at low load factors but convert to CCUS to reduce operating costs and increase load factors as the infrastructure becomes available and costs fall.
- Offshore wind will be deployed through the Contract for Difference scheme but narrowly misses the 50GW offshore wind capacity target in 2030.
- The (absolute) capacity of batteries and OCGTs will increase, offering flexibility and balancing services. They will be relied upon during periods when low carbon power is unavailable, i.e., low wind speeds or overnight.
- Onshore wind and especially solar capacity will increase over the period to 2030 as cheap (on a levelised cost basis) generation options are utilised to meet decarbonisation targets and rising demand.

- By 2030, Carbon Capture, Usage and Storage (CCUS) capacity will be increasingly deployed to reduce the reliance on unabated gas for flexibility.

Figure: Future electricity generation capacity breakdown



Source Cornwall Insight Benchmark Power Curve

For information up to 2050 and more in-depth analysis, our **GB Benchmark Power Curve Report** is available. Our experts are on hand to discuss any of the information above in more detail.



Benchmark power curve

The Benchmark power curve is a comprehensive power price modelling service, providing market and technology-specific forecasts. It delivers long-term 25 year price forecasts, informed by our significant market, policy and regulatory expertise, along with direct access to our experts.

The key benefits are:

- Understand the range of credible long-term electricity prices
- Develop investment policy
- Make informed decisions
- Technology-specific forecasts
- Support you in making decisions on the value of different routes to market

The Benchmark power curve is part of our Power revenue forecasting service which offers complete coverage and insight across all revenue streams available for a low carbon generation asset. Our comprehensive service offers regular price and value monitoring of key revenue streams and can help you to:



Maximise your commercial position



Understand the changing charging regimes and how they could impact you



Build a comprehensive business case



Mitigate risks and understand how revenues and costs are forecast to change

Contact us

Our experts will add to the insight of your team, enabling you to make better decisions faster.

We understand that people are busy in the rapidly evolving market of today, and our data and insights enable you to act faster and sharper, improving your company's financial and operational outcomes.

Our team are always on hand to answer any questions you may have and offer independent, trusted advice.

By using us, you can be assured of the latest insights and updates on the market.



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