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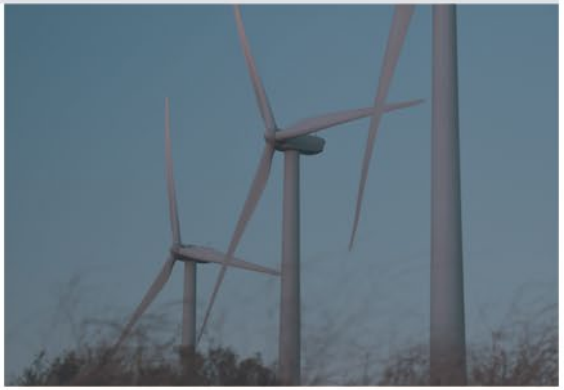
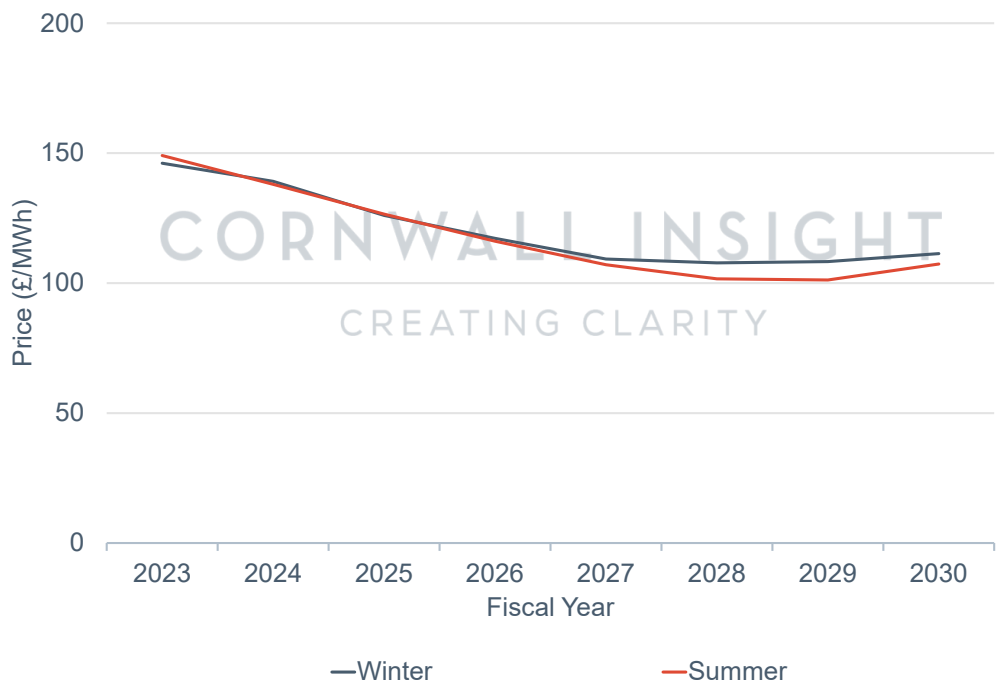
GB Power Market Outlook to 2030



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 need to run more gas and coal-fired generation to ensure supply. Natural gas prices have reduced from previous highs but remain elevated as Europe depends more on international LNG instead of cheaper Russian gas.
- Prices drop in the mid-2020s as higher marginal cost coal-fired plants retire, and new offshore turbines are built 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 the levelling of prices above pre-pandemic levels.
- Compared to our last report:
    - Increased interconnector exports to France due to lower French nuclear availability leads to a higher price floor in the late 2020s.
    - High levels of gas storage in Europe after winter 2022-23 have reduced gas supply risk and gas prices.UK ETS prices have also fallen as reduced concerns about gas fed into the demand for coal and therefore for emissions. Both drivers have decreased power prices in the short-term.

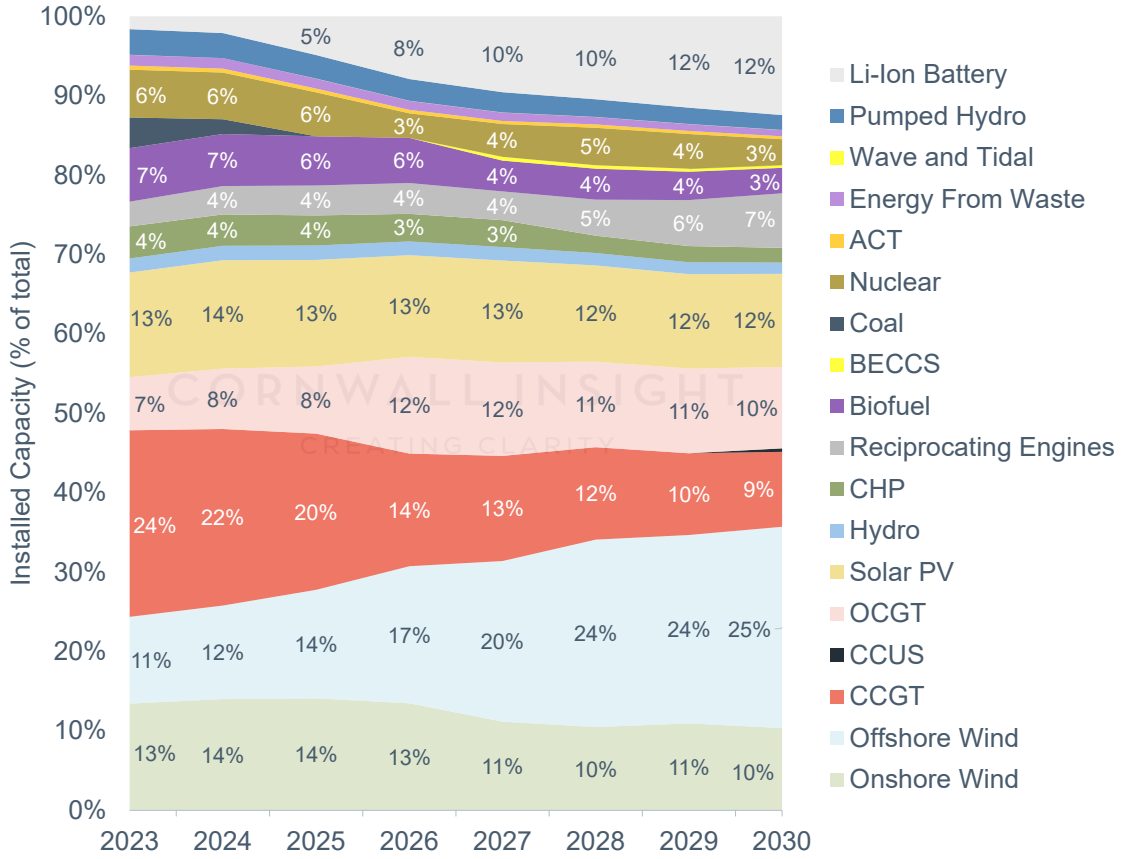
For information up to 2050 and more in-depth analysis, our **GB Benchmark Power Curve Report** is available.

Generation Technology Mix

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

- All coal capacity is due to close by April 2024, in line with the government targets with increasing carbon prices also playing a significant role in accelerating their decline.
- The Department for Energy Security and Net Zero has proposed an annual emissions limit of 350gCO_2/kWh for all existing plant in the Capacity Market and 100gCO_2/kWh for new build capacity from 2034-35. This has incentivised conversion of aging CCGT plants into OCGT plants as the higher flexibility and reduced load factors result in lower emissions overall. OCGTs are also cheaper to maintain and run.
- Based on previous Contract for Difference procurement rounds, we predict that future rounds will successfully meet the target of 50GW offshore wind capacity by 2032.
- The 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.
- Solar and onshore wind capacity will increase over the period to 2030 as cheap generation options (on a levelised cost basis) 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

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Our experts are on hand to discuss any of the information above in more detail.

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Benchmark power curve

The Benchmark power curve is a comprehensive power price modelling service, providing market and technology-specific forecasts. It delivers long-term 30 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 organisations, teams and 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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