

Great Britain

Power Market Outlook to 2030



Comprehensive market and asset-level power price forecast

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CORNWALL INSIGHT

CREATING CLARITY

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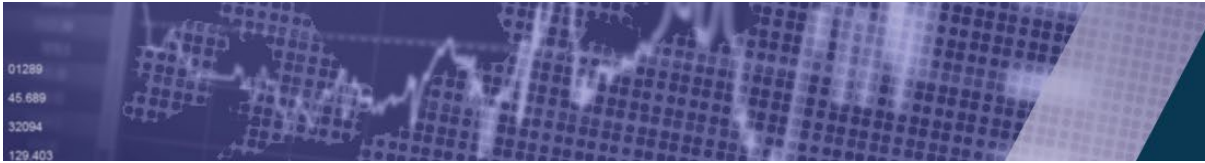
About Cornwall Insight

Getting to grips with the intricacies embedded in the energy market can be a daunting task. There is a wealth of information online to help you keep up to date with the latest developments but finding what you are looking for and understanding the impact on your business can be tough. That is where Cornwall Insight comes in, providing independent and objective expertise. Ensure your business stays ahead by taking advantage of our:

- Publications – Covering the full breadth of the energy industry our reports and publications will help you keep pace with the fast moving, complex and multi-faceted markets by collating all the “must-know” developments and breaking-down complex topics
- Market research and insight – Providing you with comprehensive appraisals of the energy landscape helping you track, understand and respond to industry developments; effectively budget for fluctuating costs and charges; and understand the best route to market for your power
- Training, events and forums – From new starters to industry veterans, our training courses will ensure your team has the right knowledge and skills to support your business growth ambitions
- Consultancy – Energy market knowledge and expertise utilised to provide you with a deep insight to help you prove your business strategies are viable

For more information about us and our services contact us on enquiries@cornwall-insight.com or +44 (0)1603 604400

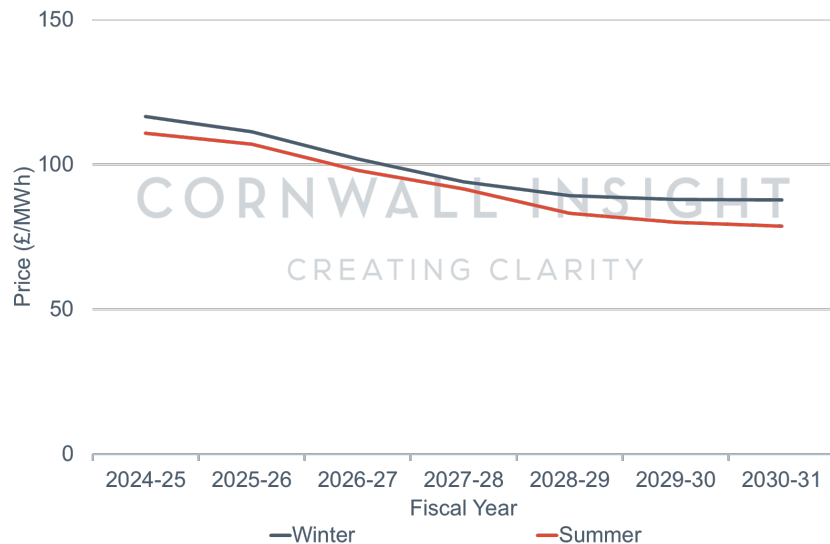




1 GB Power Market Outlook to 2030

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

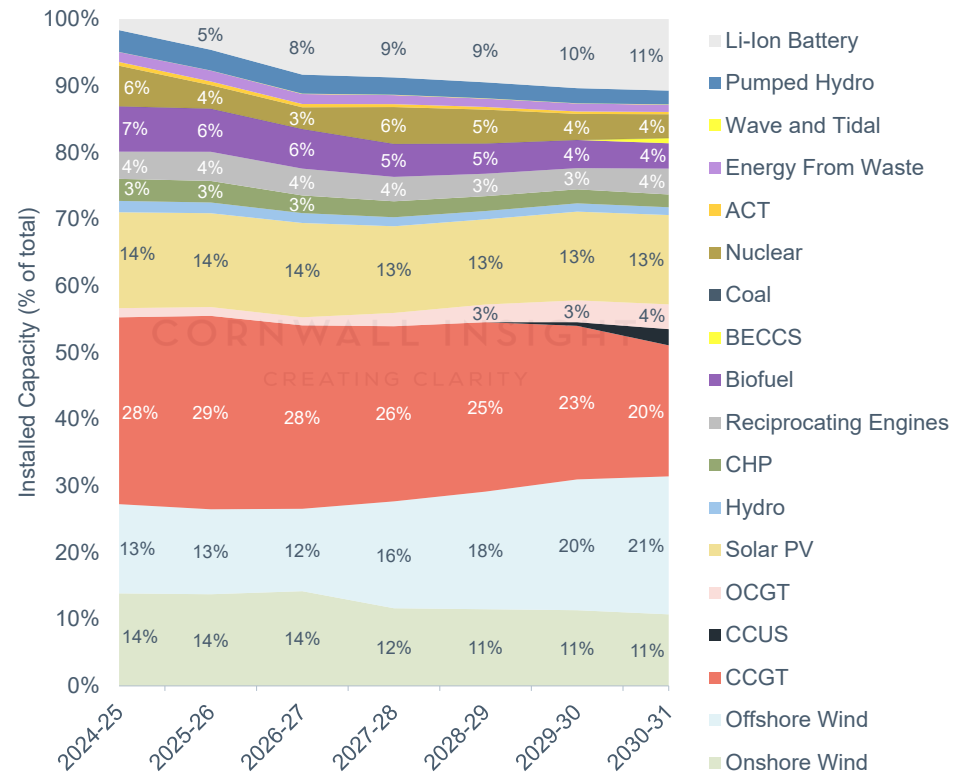
- Power prices are down due to ample gas storage levels in Europe for the winter which alleviates previous concerns regarding gas security of supply. However, while short-term natural gas prices have reduced from previous highs, they remain elevated as Europe depends more on international LNG to replace Russian gas. Thus, power prices remain above pre-2021 levels due to a need for gas-fired generation.
- Prices drop as higher marginal cost fuelled technologies are displaced by new renewables including solar, onshore, and offshore wind. The low marginal cost of renewables 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:
 - While still lower than EU ETS, the UK ETS prices have increased over recent months as demand for allowances have risen.
 - Delays to offshore wind deployments in the mid-2020s slow down the rate at which prices decrease. The delays also contribute to the government target of 50 GW offshore wind by 2030 not being met.
- 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 offshore wind were successful in Allocation Round 5 of the CFD; however, we expect future rounds to support future deployment through the Contract for Difference scheme. Still, the 50GW offshore wind capacity target in 2030 is not met.
- While the overall relative share is decreasing, onshore wind and solar capacity will increase over the period to 2030 as cheap (on a levelized cost basis) generation options are utilised to meet decarbonisation targets and rising demand.
- No coal is expected to be online in 2024 and all coal capacity is due to close by September 2024, in line with the government targets and increasing carbon prices playing a significant role in accelerating their decline.
- DESNZ proposed an annual emissions limit for existing and new build plants in the Capacity Market from 2034-35. This will incentivise some of the ageing CCGT plants to convert to OCGT plants to run infrequently at low load factors, while others will install carbon capture facilities. However, to compensate for the delays in offshore wind, more CCGTs stay online until 2030 compared to the previous report. Moreover, as they are more efficient than OCGT and the system needs additional energy more than capacity, fewer CCGTs are turned into OCGTs before 2030.
- By 2030, 'Carbon Capture, Usage and Storage' (CCUS) and 'Bioenergy with carbon capture and storage' (BECCS) capacity will be increasingly deployed to reduce the reliance on unabated gas for flexibility.
- 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.

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.



Great Britain 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.

Key Commercial Features

This is part of our power revenue forecasting service, which offers complete coverage and insight across power revenue streams available for generation and storage assets.

- 30-year forecasts of GB captured wholesale power prices for generating technologies
- Three scenarios presented (Central, High & Low) covering credible outcomes for policy, regulation, technology mix, and commodity price developments informed by in-depth and extensive market research
- Forecasts are underpinned by leading modelling practises for capacity planning and dispatch utilising the latest PLEXOS software
- Models are calibrated to the traded market ensuring forecasts are consistent with our practical expertise in real market operations

Key Benefits

Our comprehensive service offers regular price and value monitoring of key revenue streams.

- Understand the range of credible long-term electricity prices captured by different technologies
- Incorporate asset-level revenue forecasts into project/portfolio financial models to support investment cases, budgeting, asset benchmarking and business planning
- Mitigate risk arising from changes to regulation, policy and the prevailing market conditions
- Benchmark and assess the value delivered by different routes to market



Transactions & Valuations



Risk Management Market
& Regulatory Change



Portfolio & Asset Optimisation

Contact Us

Find out more about this service by contacting Ben Reade at b.reamde@cornwall-insight.com or +44 (0)7866 607963.



North West Europe* Benchmark Power Curve

**Germany, Austria and Benelux*

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.

Key Commercial Features

This is part of our power revenue forecasting service, which offers complete coverage and insight across power revenue streams available for a low carbon generation asset.

- 30-year power and commodity (gas, oil, carbon) wholesale curves for Germany, Austria, Netherlands, Belgium and Luxembourg power markets
- Technology capture prices (e.g. solar, onshore/offshore wind, baseload)
- High, central & low scenarios by generation mix and commodity prices
- Developed in collaboration with the Institute of Energy Economics at the University of Cologne (EWI)

Key Benefits

Our comprehensive service offers regular price and value monitoring of key revenue streams.

- Designed to support business case development and investments in power generation assets
- Short-term forecasts are calibrated to the traded market to ensure they reflect current market dynamics
- Mitigate investment risk through accurately reflecting key regulatory and policy developments



Transactions & Valuations



Risk Management Market & Regulatory Change



Portfolio & Asset Optimisation

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Don't miss our upcoming webinar

17 January 2024 | 11:00am-12:00pm GMT

Modelling the Journey Towards a Low-Carbon Future: Focus on North West Europe

Join us for an exciting webinar where we will reveal exclusive insights from our brand-new North West Europe Benchmark Power Curve. Discover how Germany, Belgium, Netherlands, Luxembourg and Austria are coping with the ongoing energy volatility and what it means for their net zero targets.

Find out how policy decisions are shaping the future of the region's energy sector – and what challenges and investment opportunities lie ahead. You will also have the chance to ask questions and join the discussion during the Q&A session. Don't miss this opportunity to discover our power price forecasting service and how it can help you make informed decisions in the energy market.

[Register here](#)



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