### CORNWALL INSIGHT

CREATING CLARITY

# GB Power Market Outlook to 2030





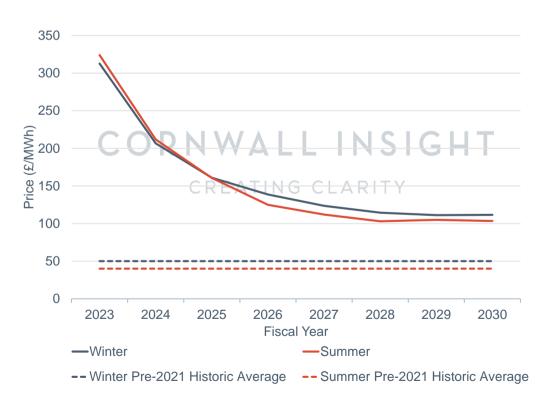


CREATING CLARITY

## 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 in winter 2022 have risen as Russian gas supply uncertainty in the EU adds significant risk premiums to the gas forward curve. This is further exacerbated by prolonged outages of French nuclear capacity and low rainfall levels affecting Norwegian hydro.
- Prices drop in the 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 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:
    - Gas prices have increased, making periods of low renewable availability more expensive.
    - Connection dates for some interconnectors have been delayed, reducing exports and applying downward pressure on prices in the near term.
    - Higher level of exports to Europe in the late 2020s keeps demand high and therefore the point at which price levels off is higher.



#### CORNWALLINSIGHT

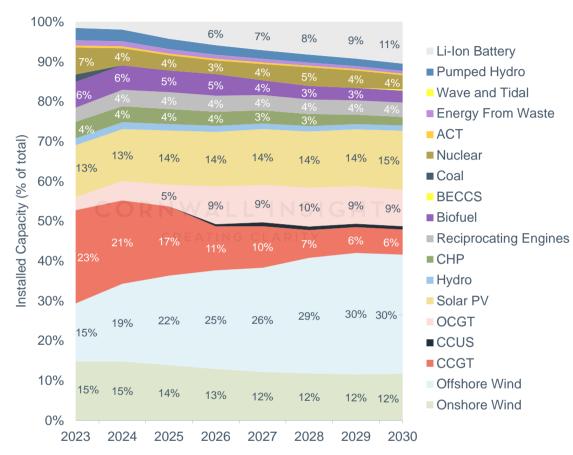
CREATING CLARITY

### **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. We have also assumed that coal capacity will
  be available for the winter of 2022-23 only as a last
  resort measure, in line with the <a href="C16">C16</a> consultation
  published by NGESO.
- CCGT capacity is ageing, and a substantial portion is converted to OCGT through the mid-2020s allowing it to be operated more flexibly and help maintain system security.
- There will be a growth in offshore wind to reach the government target of 50GW of offshore wind by 2030.
- Capacity of batteries, including longer duration 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

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

CREATING CLARITY



# 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.



Bertie Bagge Business Development Manager

b.bagge@cornwall-insight.com +44 (0)7884 177274

#### CORNWALLINSIGHT

CREATING CLARITY

### **Disclaimer**

The opinions contained in this report constitute the current opinions of Cornwall Insight and are produced for informational purposes only. This report should not be construed as an offer, recommendation or solicitation to buy, sell or deal in any commodity, product or security or to enter into any trading or investment activity whatsoever. Any use by you or any third party of any information or other material contained in or associated with this document signifies agreement by you or them to these conditions. The report makes use of information gathered from a variety of sources that have not been subject to independent verification. Cornwall Insight do not give any representation or warranty as to the accuracy or completeness of the information collected from market participants or from sources in the public domain. Cornwall Insight do not make any warranties, whether express, implied or statutory regarding or relating to the contents of this report and specifically disclaim all implied warranties, including, but not limited to, the implied warranties of satisfactory quality and fitness for a particular purpose. While Cornwall Insight consider that the information and opinions given in this newsletter/report and all other documentation are sound, all parties must rely on their own skill and judgment when making use of it. Whilst every effort is made to ensure the accuracy of any information or material contained in or associated with this document, none of Cornwall Insight or their affiliates and employees, either individually or collectively accept any responsibility for any loss, damage, cost or expense of whatever kind arising directly or indirectly from or in connection with the use by any person whomsoever of any such information or material; neither do they make any representation or warranty as to the accuracy or completeness of the data, information or statements contained herein.