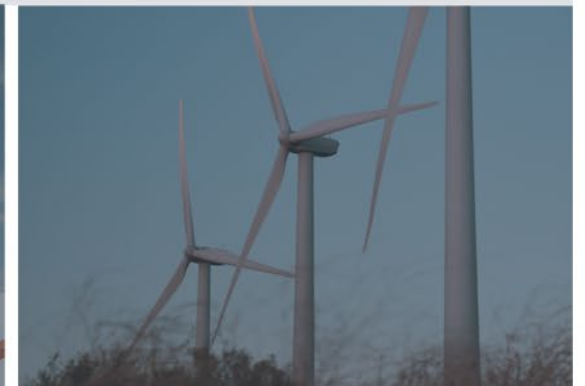


# All-Island Power Market Outlook to 2030



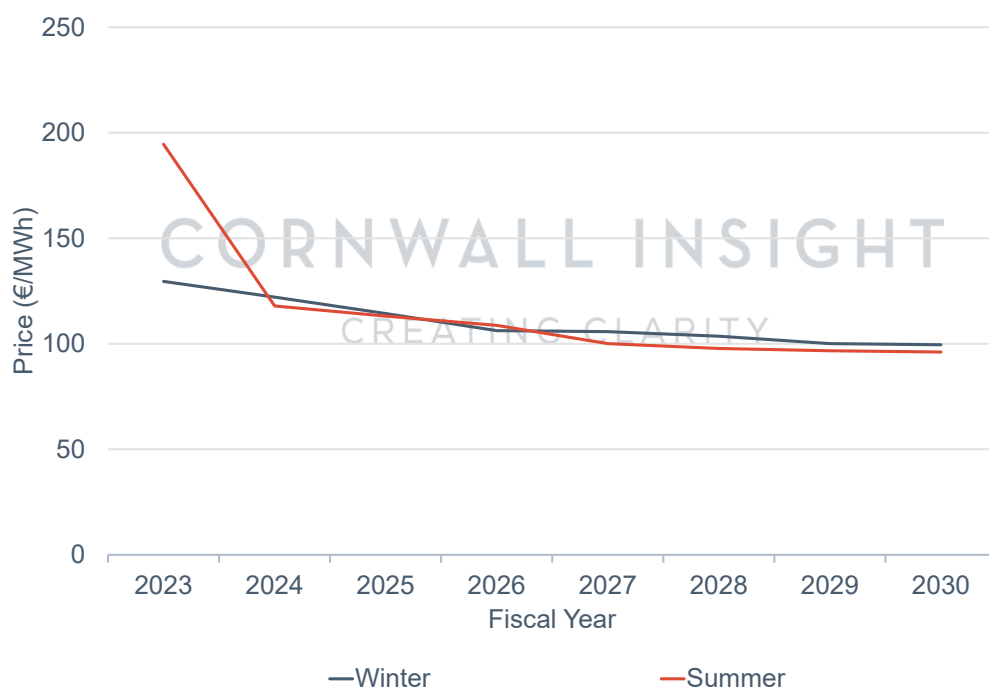
Q1 2023



# 1 All-Island Power Market Outlook to 2030

This report provides an annual overview of trends for the All-Island Power Market out to 2030 using outputs from Cornwall Insight’s latest forward curve for the All-Island (AI) Single Electricity Market (SEM) covering Northern Ireland and the Republic of Ireland. 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 All-Island Forward Curve

## 1.1 Key Drivers

- Power prices are high for the remainder 2023 due to high gas prices. Gas prices have decreased over the last couple of months but stay elevated at early 2022 levels as Europe relies more on international LNG rather than cheaper Russian gas.
- Power prices ease in the mid-2020s as low marginal cost renewable generators are built to meet the 80% renewable generation target by 2030, coupled with the closing of higher marginal cost coal and oil-fired plants. The completion of the North-South interconnector linking Northern Ireland and the Republic of Ireland also improves network efficiencies.
- Prices are relatively flat from the late 2020s as demand growth is mainly met by low marginal cost generators and the completion of the Celtic and MaresConnect interconnectors allows the market to become a net exporter, establishing a price floor.
- Compared to our last report the high levels of gas storage in Europe after winter 2022-23 have reduced concerns about gas supply and caused prices to fall. Other changes include reforms to the EU ETS are keeping prices high in the short term and add upward pressure on power prices.
- Seasonal prices are closer in this report due to forecasted increases in interconnector exports and decreased imports. This effect is stronger in the summer, increasing summer demand and prices relative to winter.

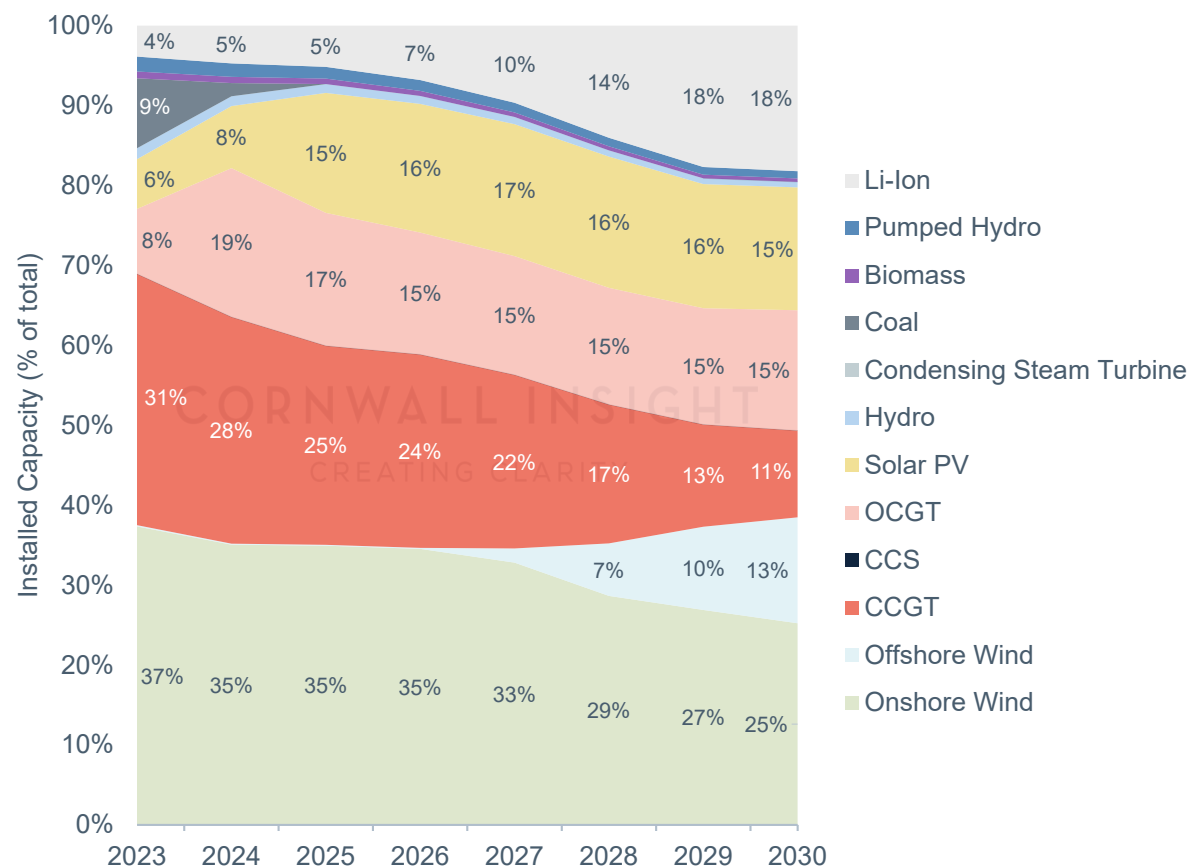
For information up to 2050 and more in-depth analysis, our **All-Island Forward Curve Report** is available.

## 1.2 Generation Technology Mix

Underlying the movements in forecasted power prices are the significant changes to the technological makeup of the system.

- As carbon prices increase, coal station profitability decreases. They mainly generate in the winter when the system is tighter and are forced off the system in 2025.
- CCGT capacity falls as units are retired. CCGTs are used to meet demand during periods of low wind.
- OCGT capacity grows to maintain system security. The technology has better dynamic characteristics and is cheaper to deploy than other thermal stations.
- Offshore wind will be deployed through government subsidy to meet the 80% renewable electricity target in 2030. The cost of deployment will continue to fall as the technology matures.
- Solar and onshore wind capacity will increase over the period to 2030 as low-cost generation options (on a levelised cost basis) are utilised to meet decarbonisation targets and rising demand.
- Battery storage capacity will increase to offer flexibility and balancing services. They will be needed to fill in during periods when low-carbon power is unavailable.

Figure 2: Future electricity generation capacity breakdown



Source Cornwall Insight All-Island Forward Curve

For information up to 2050 and more in-depth analysis our **All-Island Forward Curve Report** is available.

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

## Our modelling expertise

Cutting-edge modelling tools and architecture...



- Utilising the latest Plexos software
- Long-term planning model assessing capacity and system requirements
- Detailed dispatch model producing power price views

...combined with unparalleled market expertise and understanding



- Team experience across utilities, developers and regulators
- Practical expertise in trading and asset management
- Insider view of expected view regulation and policy outcomes

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