Blowing away the competition

What to make of Britain's 2024 renewable energy auction results

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Jonathan Marshall

The latest round of renewable energy auctions procured a record 9.6 gigawatts (GW) of low-carbon energy, of which the majority (5 GW) was offshore wind. This represents a much-needed acceleration towards the new Government's ambitious decarbonisation targets and was essential given the failure of last year's auction. This is good news: as well as quickly moving the UK towards a zero-carbon electricity system, more renewable energy reduces the risks to household finances and to the wider economy from the UK's on-going reliance on natural gas, which remains subject to volatile market pricing.

But scaling up the auction has come at a cost, with contracts for offshore wind signed at £54 per megawatt hour (in 2012 prices, or £75 in today's prices), a 45 per cent increase over the record lows (£37.35 in 2012 prices) seen in 2022's auction. This partly reflects economic factors outside the Government's control – including high interest rates, high prices in commodity markets, and supply chain constraints – but also a reduction in competitive pressures from providers. There are signs that these external pressures will ease, but a combination of high demand from Government and relatively slow-moving supply is likely to mean that competitive pressure remains weak, at least in the short term.

Looking ahead, higher prices in one auction will not make a material difference to family spending: securing 5 GW of offshore wind capacity for £10/MWh less would save less than £5 annually from a typical energy bill. And at this point it is easy to justify a small extra cost to reduce the exposure to future gas price spikes.

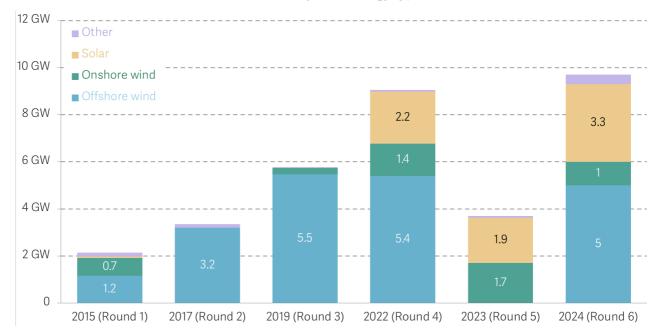
But with cheap electricity vital for both household living standards and accelerating decarbonisation in other parts of the economy, policy makers need to ensure that costs are kept as low as possible in future auctions. This means taking steps to keep competition tight, using the public balance sheet to reduce the cost of borrowing and avoiding adding extra costs and levies onto renewable contract prices.

The latest renewable auction has been the biggest yet, but this increased ambition has come at a cost

The new Government has made decarbonising the electricity system one of its main policy priorities, but will not attain a zero-carbon grid without a rapid increase in the volumes of energy procured through the Contracts for Difference (CfD) auction process. This is a task made harder by the <u>disappointing 2023 auction</u>, in which no offshore wind projects were successful. In this context, today's auction results revealed a record <u>9.6 GW of renewable</u> energy was procured.¹ Most of this is for offshore wind (5 GW), as shown in Figure 1.

Figure 1 The latest renewable energy auction has delivered a record amount of capacity

Renewable energy generation capacity awarded contracts in the UK Government's Contract for Difference auctions, by technology type and auction round



Notes: Other = tidal stream, biomass and energy from waste. Remote island wind is classed as onshore wind and floating offshore wind as offshore wind. Offshore wind capacity that was successful in bidding into the sixth allocation round despite being awarded contracts in previous rounds is shown in the 2024 results.

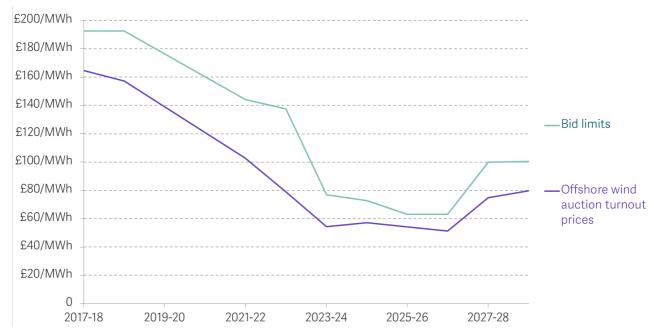
Source: RF analysis of Low Carbon Contracts Company data.

This is good news. It represents a big step towards the Government's 2030 decarbonisation target, and will reduce carbon emissions as well as cut the UK's reliance on global gas markets, which remain highly volatile. This is important because the risk of a gas price spike is both more apparent in the short term – as demand is inelastic – and asymmetric, as potential supply shocks mean risks of higher prices are more likely than those associated with a supply glut. The results also hint at a change in strategy from that employed by the previous Government, which largely prioritised price over volume through the use of small budgets (less than £300 million in 2022), resulting in high levels of competition between developers and costs significantly undercutting expectations.

But these higher volumes have come at a cost. Contracts were signed for lower prices than the maximum bid limit for the auction round (£73 in 2012 prices),² but deals for offshore wind signed in 2024 were at a price 45 per cent higher than those in 2022 (£54 per megawatt hour, compared with £37.35, or £75 and £52 in current prices, as shown in Figure 2). This is partly a result of simple economics: a bigger auction budget represents an increase in demand while the fixed volume of supply is largely fixed, as projects require long lead times before they can bid into auctions, overcoming obstacles such as planning permissions and identifying grid connections before they can submit bids.

Figure 2 Freshly signed renewable energy contracts are more expensive than in previous years, but well under the auction bid limit

Contract for difference auction bid limits and offshore wind clearing prices, by project commission year, and wholesale electricity prices (historical and forecast): GB



Notes: Figures shown in current prices. Source: RF analysis of DESNZ, Low Carbon Contracts Company, ONS data.

There are promising signs that external pressures that are increasing renewable costs will start to fade

In addition to increased demand, this auction was subject to drivers of higher costs that sit outside of Government control. Renewable energy investment is highly sensitive to capital costs – for example, previous RF work shows that an additional 4 percentage points on borrowing costs adds 31 per cent to offshore wind project costs – and interest rates remain well above the norm throughout the 2010s and early 2020s. The costs of materials such as steel and copper were also impacted heavily by the Covid-19 pandemic, and supply chains have been struggling to meet a rapid increase in global demand for renewable energy as countries have responded to the gas price crisis by doubling down on wind and solar buildout.

Thankfully, though, there appears to be light at the end of the tunnel. Core commodity markets, such as hot-rolled steel and copper, have been falling in price to the extent that materials are now being sold at prices close to their pre-pandemic norms. And there are encouraging signs that investment in global supply chain bottlenecks has responded to higher global demand. But while interest rates are forecast to fall – the <u>market curve</u> suggests Bank of England policy rates will fall below 4 per cent over the next 18 months – a return to the near-zero rates that underpinned the first stage of Britain's renewable rollout seems unlikely.

The impact on household finances from one auction will be small, but policy makers need to ensure renewable electricity costs are as low as possible in the future

Providing that renewable energy costs can resume their downward trajectory in the future, higher prices in one auction should not have a material impact on family living standards. A reasonable counterfactual here is the cost of procured capacity being around £10 per megawatt hour lower if tighter auction parameters (for example, spreading the 5 GW of offshore wind projects over multiple auctions to up competitive pressure) were employed.³ If this was the case, the typical household would save less than £5 per year once all of the wind farms are generating. This is certainly not a huge difference and spreading buildout over multiple auctions would also mean the UK's exposure to international fossil-fuel markets remained higher for longer. So, one way to view the higher price in the current auction round is as partial insurance against future spikes in wholesale energy prices.

Longer term, however, ministers need to regain a laser focus on ensuring that electricity is as cheap as possible. Low-cost electricity is not only vital for keeping energy bills low and ensuring that families' spending on essentials is minimised, but it also creates an economic incentive for households to switch to electric vehicles and electric home heating – two areas in which extensive efforts are needed over this parliament if the UK is to meet its carbon targets. And, as the CfD scheme will be (and should be) the main mechanism for bringing new renewable capacity online, and for de-linking the prices of wholesale gas and electricity, we need to think about the current system and what changes could be made to ensure that higher demand in forthcoming renewable auctions can be realised at the lowest possible price.

So, what does this look like?

First, the Government needs to ensure that competition is as tight as possible in all auctions, so that energy company profits are squeezed and prices are kept low. This means effectively balancing volume and price in the auction design, but also ensuring that the <u>pipeline of projects in development</u> remains larger than projected future demand by removing obstacles in the pre-application process so that more projects are eligible to bid in future auctions.

Second, the Government could use the state balance sheet to bypass higher private borrowing costs. <u>GB Energy is already leaning into this idea</u>, but only for less-developed technologies where the cost of capital can be prohibitive to getting spades in the ground. One option is to increase the funds available for GB Energy so that it can underpin multibillion-pound projects, which would help to ensure that the pace of buildout needed to decarbonise power by 2030 can be achieved without locking in higher electricity costs for the long term.

And third, ministers should avoid adding additional costs into the CfD process, such as the additional £500 million 'British Jobs Bonus' pledged in Labour's <u>General Election Manifesto</u>. While the benefits of such a scheme – resilient domestic supply chains and new jobs in industrial heartlands – are certainly a good thing, they should not be funded in a manner that increases electricity prices.

The Government must remain focused on keeping costs for energy consumers down

Signing contracts for a record amount of renewable energy is a vital step towards achieving a zero-carbon power system by 2030. But it has come at a higher cost than if less had been procured. There are promising signs that many drivers of higher costs are waning, but decarbonising the electricity system remains crucial to the wider net zero transition. So policy makers must work to keep costs down. The CfD model will be with us for the foreseeable future, but it is far from perfect and as such ministers should examine what changes can be made so that the rapid expansion of renewable energy that the latter half of this decade will bring also results in energy that is as cheap as possible.

¹ Capacity figures referred to in this note account for projects that were awarded contracts in the 2022 allocation round but were authorised to re-enter a share of capacity in expectation of receiving higher prices. This capacity has been removed from discussions of the 2022 auction to prevent double counting.

² While this note follows Government tradition of referring to energy costs in 2012 prices, efforts to account for inflation since then should be incorporated into energy policy more widely such that onlookers are able to more fully understand the true costs associated with different forms of electricity generation.

³ This figure is in line with additional costs that would be incurred if contracts penned in previous auctions were done so in todays environment of higher interest rates, assuming that the only upward pressure on prices comes from capital costs, instead of a change in the balance between supply and demand.