

Energy UK explains: Allocation Round 6 and the UK's energy security goals

February 2024

Key Points

- The Contracts for Difference (CfD) scheme has been key to the expansion of cheap, homegrown renewables by bringing investors certainty, and lowering the cost of capital.
- **Despite earlier successes, the CfD scheme has underdelivered in recent years.** The last annual auction – Allocation Round 5 (AR5) – failed to secure any new offshore wind.
- Without a step change in the renewable capacity procured this year – in AR6 – **there are serious risks that the Government will be unable to achieve its target of 50GW of offshore wind by 2030**, or its broader goal of a decarbonised power sector by 2035.
- Falling behind on our targets would:
 - **Leave the UK needing more imported liquified natural gas, exposing us to volatile gas prices for longer.**
 - **Squander the opportunity to build renewable capacity that could have provided clean power to a quarter of all households.**
 - **Lose out on the opportunity to reduce carbon emissions equivalent to those produced by the whole of Essex.**
- To get the CfD scheme back on track the Government needs to put in place an ambitious budget and auction parameters which maintain the UK's position as a global leader in renewables.

Recent Allocation Rounds have failed to deliver

- The Contracts for Difference (CfD) scheme is the cornerstone of the UK's clean energy strategy. Since its introduction in 2014, the CfD programme has played a key role in derisking investment, bringing down costs for renewables such as offshore wind, and cementing the UK as a global leader in this technology.
- CfD auctions, known as Allocation Rounds, are held annually. The next Allocation Round (AR6) is due to take place this summer (2024).¹
- Whilst the CfD scheme has been highly successful in procuring growing volumes of renewables capacity, the last two Allocation Rounds (AR4 and AR5) have failed to deliver the renewables capacity required to meet the UK's energy security targets.
- The AR4 process in 2022 resulted in the collapse of a major 1.4GW offshore wind project, due to rising capital costs and supply chain price inflation. This project was originally intended to provide electricity to 1.5 million homes and may still be developed, but with a likely delay of several years.²
- This will have implications for AR6 and 7, now having to secure additional capacity.

Global factors have led to increased costs for Offshore Wind

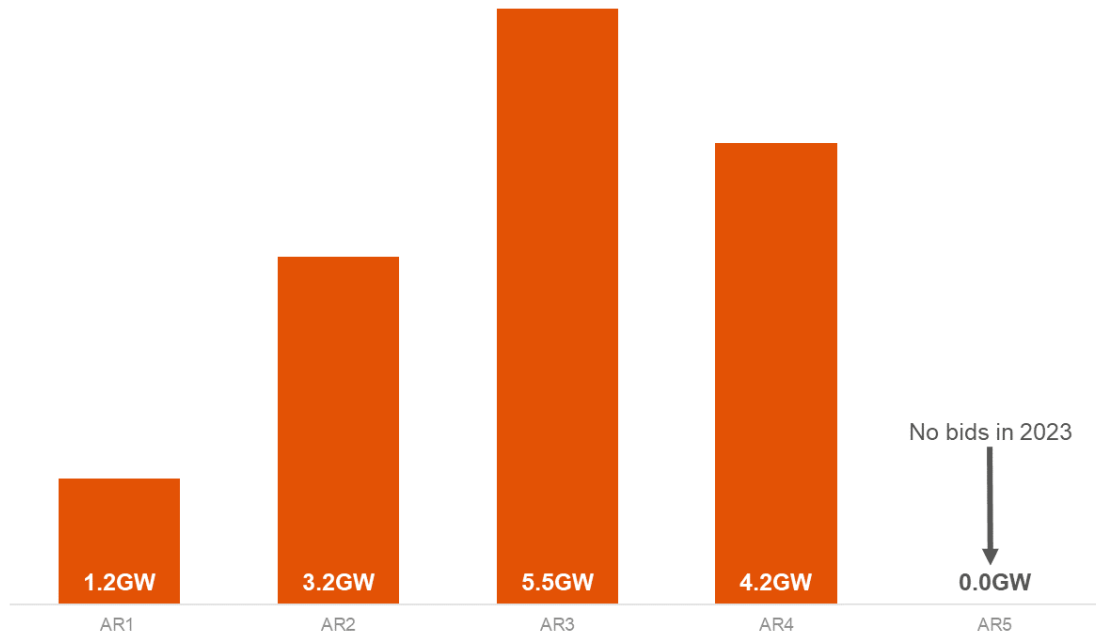
- The AR5 auction in 2023 received zero bids from offshore wind developers, despite calls from industry for at least 8GW to achieve the Government's offshore wind target.³ Although other technologies were successful (including geothermal featuring for the first time), this represented a major setback to the UK's energy transition.

¹ [LCCC \(2023\). Allocation Round 6: Indicative timeline scenarios](#)

² [The Guardian \(2023\) Giant windfarm off Norfolk coast halted due to spiralling costs](#)

³ [Energy UK \(2023\). Allocation Round 5 – Why it matters, and risks to the UK if the Government doesn't act](#)

Figure 1: Offshore wind capacity by CfD Allocation Round (2014-2023)



Source: Energy UK analysis of BEIS/DESNZ announcements and LCCC CfD register. Capacity with a CfD as of 19/02/24

- The cause of this failure was simple; an insufficient CfD budget and poor price mechanisms which did not account for increased project costs due to supply chain issues and commodity price increases resulting from the war in Ukraine. Although these challenges were present across the energy sector, they were felt most acutely in offshore wind.
- In response, the Government has increased the auction price ceiling for offshore wind to £73/MWh for AR6, up from £44/MWh in AR5, which is a more realistic reflection of costs.

What AR6 needs to deliver

- The Government has set an energy security target to have 50GW of offshore wind by 2030.
- There is ~15GW already in operation and a further ~14GW either under construction, awarded a CfD contract, or having already taken a Final Investment Decision.
- To achieve the 50GW by 2030 target, an additional 21GW of offshore wind needs to be enabled. Given that it takes around five years from receipt of a CfD contract to a new offshore wind farm producing electricity for the first time, only CfD contracts awarded in the next two rounds (AR6 and AR7) can realistically contribute to the target by 2030, which under current timescales, is still ambitious.
- AR6 and AR7 need to **award at least 10GW of offshore wind** in each round for there to be a chance of reaching the 50GW target.
- This is likely to be split between the next two Allocation Rounds – availability of supply chain, skilled workers, and appropriate vessels for construction, means that it is unrealistic to expect that 21GW could be achieved from just one CfD auction round.

- There are currently around 8-12GW of offshore wind projects that have secured planning consent and are eligible to participate in AR6, in addition to 3GW deferred from AR4.⁴ The next two auctions must be capable of bringing forward the current pipeline of projects as soon as possible.

Figure 2: Progress towards offshore wind target



Source: Energy UK analysis of [Crown Estate](#) and [RenewableUK](#), rounded to nearest GW

- This could potentially be an underestimate, especially if projects that have been awarded a Contract for Difference are not delivered. AR6 is complicated by the underdelivery of AR4 – almost 3GW of offshore wind capacity that was procured through AR4 have terminated or reduced their contracts due to CfD prices that were simply too low to enable construction.⁵

How to realise our offshore wind ambitions

- Delivering a total of over 21GW of offshore wind at the next two auctions will require ambition and cooperation between industry and Government.
- The increased Strike Prices are a welcome first step, but they must align with the remaining auction parameters and the UK's offshore wind targets. Future budgets – the figure which dictates how much capacity can be procured in a particular Allocation Round - should therefore consider the shortfall from AR4 and AR5 and be sufficient to deliver the required 10GW capacity in each round.
- To maximise the chances of success, Government should:
 - Maintain Administrative Strike Prices that appropriately reflect market conditions,
 - Ensure the reference prices are adjusted for all technologies to reflect realistic market conditions as this will reduce the need for a larger budget.
 - Provide budgets for the Allocation Rounds that are adequate to deliver the required capacity to reach the UK's offshore wind target of 50GW, and 5GW of floating offshore wind by 2030.
 - Build on the successful work to make investment in UK renewables attractive, such as permanent full expensing and exempting new capacity from the Electricity Generator Levy.

⁴ [Utility Week \(2024\), Up to 12.2GW of offshore wind eligible for next CfD round](#)

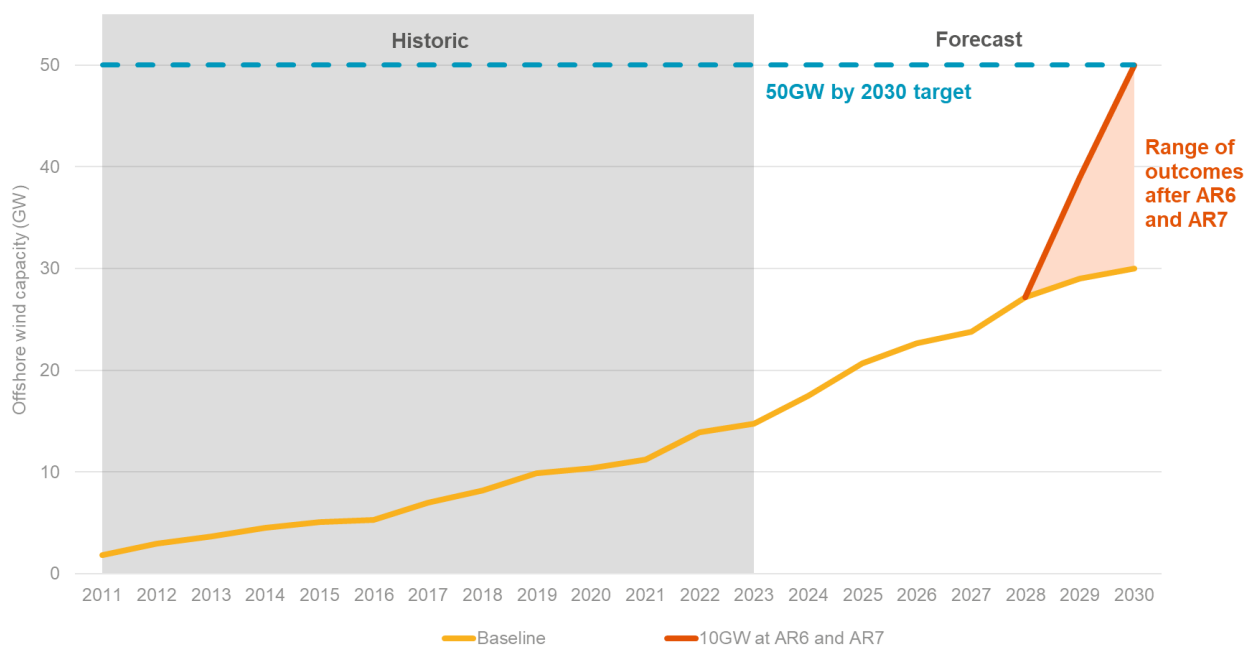
⁵ [Energy UK analysis of LCCC \(2024\), CfD Register](#)

- Continue to address challenges in planning, grid connections, seabed licencing and supply chains.
- Monitor and address future barriers to deployment, such as the scope for tax reliefs that can be claimed by investors, highlighted by the recent Gunfleet Sands tax case.

The consequences of underdelivery

- The Government’s 50GW target was set as part of its Energy Security Strategy, which was drafted as a response to increasing global volatility of energy sources and prices.
- Increasing domestic sources of clean energy generation not only reduces dependence on other countries, it will also help the UK meet its wider Net Zero targets.
- If the next two auctions only deliver offshore wind capacity at the same rate as AR4 (7GW – the amount of offshore capacity originally procured in AR4), the UK will fall short of our offshore wind target by 7GW.
- That 7GW of missing capacity could:
 - Provide enough clean power to provide a quarter of the electricity used by households in 2022⁶
 - Displace enough gas generation to cut LNG imports by 18% (compared to 2022)⁷
 - Avoid carbon emissions equivalent to more than those produced in Essex or Lancashire in 2021⁸
- Underperformance of future auctions will leave the UK less secure and more exposed to high and volatile gas prices.

Figure 3: Offshore wind capacity trajectories to 2030



Source: Energy UK analysis of DUKES, FES, Renewable UK, and LCCC

⁶ Energy UK analysis assuming a capacity gap of 7GW and based on [DESNZ \(2023\)](#), [DUKES](#) and [National Grid ESO \(2023\), Future Energy Scenarios](#)

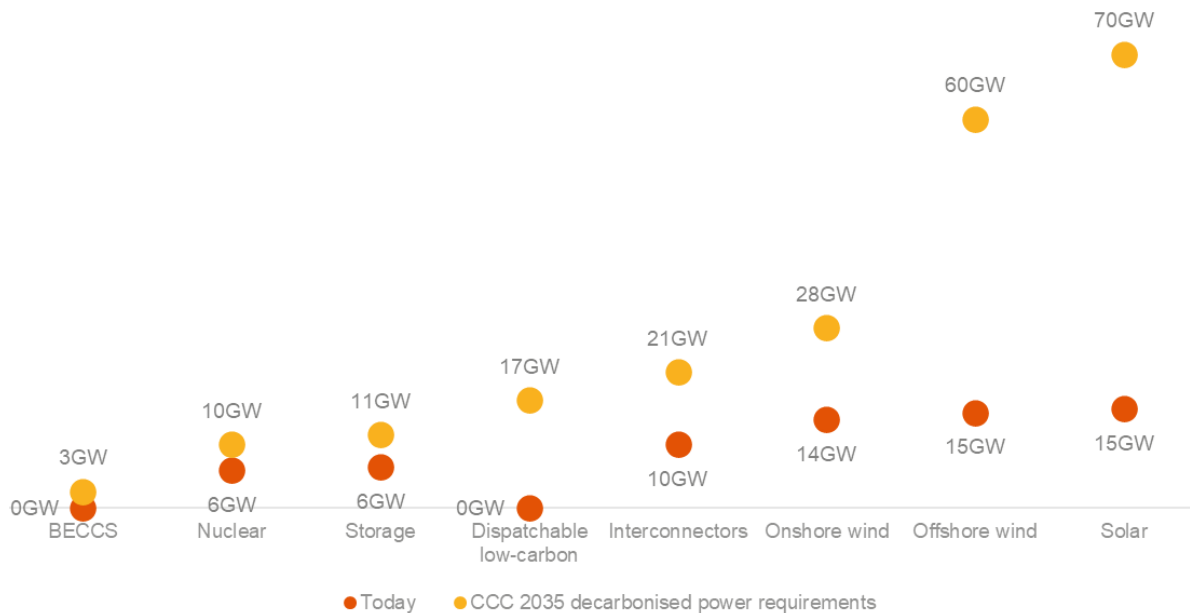
⁷ Energy UK analysis assuming a capacity gap of 7GW and based on [DESNZ \(2023\)](#), [DUKES](#)

⁸ Energy UK analysis of [DESNZ \(2023\)](#), [UK local authority and regional greenhouse gas emissions national statistics, 2005 to 2021](#)

The broader picture

- The Government has committed to achieving a decarbonised power sector by 2035. The Labour party has pledged to bring that target forward to 2030.
- The mass rollout of renewable generation capacity – especially solar and wind – is vital to achieving this goal. This mass deployment will be facilitated primarily by the Contracts for Difference programme, particularly for offshore wind.

Figure 4: Renewables capacity required for a decarbonised power system in 2035



Source: [Climate Change Commission \(2023\). Delivering a reliable decarbonised power system](#) for 2035 requirements and Energy UK analysis for current capacity.

Note: There is a range of technologies included under both "storage" and "low-carbon dispatchable". There is a great deal of uncertainty about both the mix of technologies used to deliver storage and low carbon dispatchable power and the level of capacity that will ultimately be required.

- Analysis for the Climate Change Committee shows that the capacity of offshore wind and solar both need to quadruple to achieve a decarbonised power system in 2035. This is alongside the rapid development required of new technologies including bioenergy with carbon capture and storage (BECCS), energy storage, and dispatchable low-carbon generation.
- The CfD will remain the primary mechanism for deploying renewable energy and it must remain adaptable and responsive to changing market dynamics. We have an opportunity to ensure the next auction rounds can bring forward the volumes needed to meet our energy security targets and maintain the UK's position as a global leader in renewable energy.
- By following the steps outlined above, we can avoid repeating the mistakes of AR5, restore investor confidence, and unlock greater investment in the UK's clean energy transition while enhancing our energy security and delivering for customers.