

Energy UK explains: how much renewable energy can we expect from Allocation Round 6?

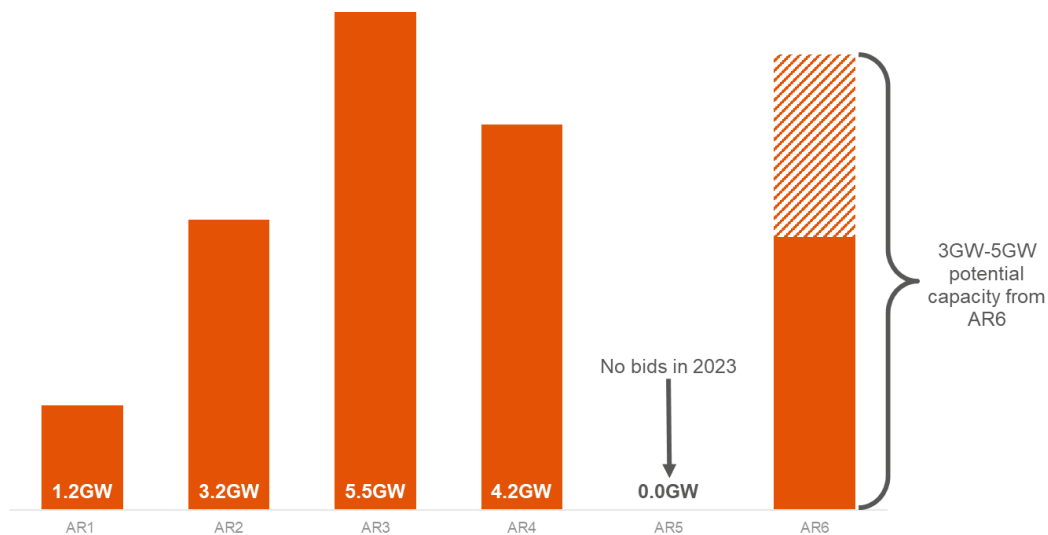
March 2024

Key Points

- At over £1bn, the Allocation Round 6 (AR6) budget is the largest ever announced to support renewable electricity Contracts for Difference (CfD).
- This vastly increased budget reflects a welcome recognition by the Government that offshore wind developers face particularly difficult economic and market conditions.
- There is a significant shortfall of capacity following the under-delivery of AR5 in 2023, which means the next two rounds (AR6 and AR7) must deliver around 21GW of new capacity to reach our target offshore wind targets.
- Given the budget, AR6 is likely to deliver 3GW-5GW of offshore wind capacity.
- This would mean the next auction (AR7) would have to acquire an unrealistic 16GW of offshore wind to reach the 50GW of offshore wind by 2030 target.
- In order to meet our energy security targets the Government should increase the budget, subject to information and insight on the pipeline to deliver greater capacity.

There is currently a shortfall of renewable energy capacity

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

AR5 saw 1.9GW of solar and 1.7GW of onshore wind, as well as awarding a contract for geothermal power for the first time. However, no offshore wind projects bid into AR5 because costs had risen above the prices allowed by the auction. With the Government targeting 50GW by 2030, this slowdown represented a major bump in the road to reaching our energy security targets. The Government has responded to industry by increasing the Administrative Strike Price (auction ceilings) and the budget for the upcoming AR6.

What does this budget mean?

The Government has confirmed a budget of **£1.025bn** for AR6, which is the largest budget for a Contracts for Difference (CfD) allocation round to date and will help to ensure the scheme can support the delivery of renewable energy projects. This includes **£120m for Pot 1 (established technologies)**, **£105m for Pot 2 (emerging technologies)** and **£800m for Pot 3 (offshore wind)**. These parameters will be used to hold an auction in the summer 2024.

The amount of capacity that AR6 can deliver depends on the Strike Prices that the upcoming auction clears at, and the mix of technologies that are bought forward. Energy UK has estimated a range of capacities based on plausible assumptions about how the auction could clear.

Established technologies (Pot 1)

Onshore wind (including Remote Island Wind) and solar are likely to absorb most, if not all of the established technology budget. Depending on how the pot is shared, the auction could deliver 700MW of onshore wind and 1GW of solar if the strike prices stay the same as AR5. If the strike price rises to the Administrative Strike Price (the auction ceiling), AR6 could deliver 500MW of onshore wind and 600MW of solar.

The Government has allowed a maximum budget threshold for onshore wind, solar and remote island wind of £120m each, to ensure there are technology-specific clearing prices.

Emerging technologies (Pot 2)

A bright spot in AR5 was awarding a CfD for geothermal generation for the first time. This and other emerging technologies like tidal and floating offshore wind represent the potential energy breakthroughs of the future and opportunities for the UK to lead the world in new developments. Depending on the technology mix and strike prices, AR6 could deliver between 150MW-220MW of emerging technology.

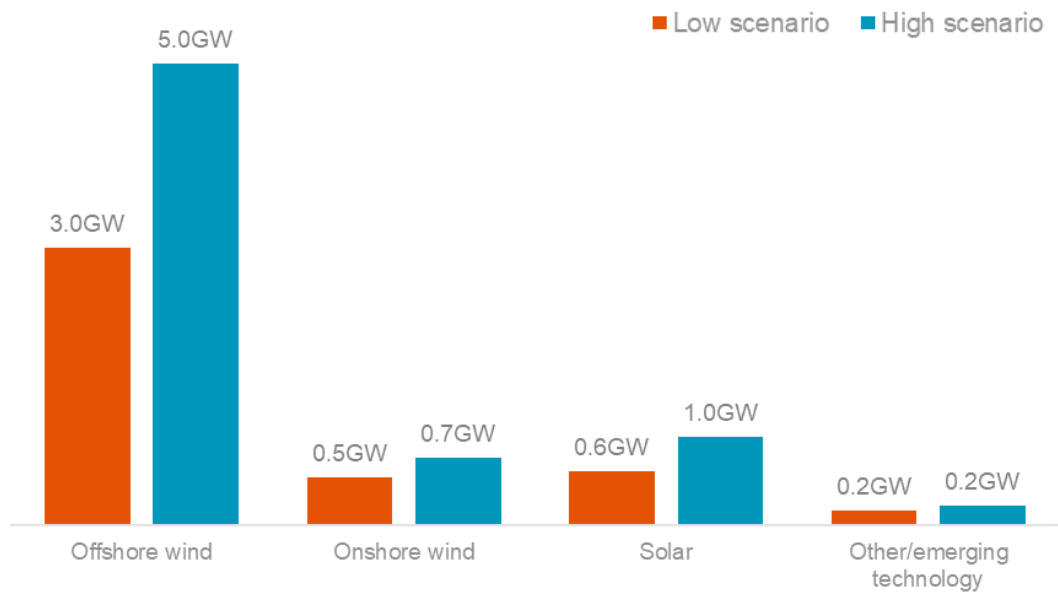
The £10m minimum budget for tidal stream is welcome support for an emerging technology in which the UK is a world leader. However, the lack of ringfenced funding for floating offshore wind and wave projects could hamper the UK's ability to nurture these emerging technologies. This is particularly concerning given the UK's energy security target of 5MW of floating offshore wind by 2030.

Offshore wind (Pot 3)

The re-introduction of a separate pot for offshore wind is a welcome change in AR6, and something Energy UK has advocated strongly for. There will be a budgetary maxima for 'permitted reduction' projects from AR4 and new offshore wind projects at £800m each.

Our analysis shows that if strike prices are between £55/MWh-£70/MWh offshore wind capacity would be 3GW and 5GW.

Figure 2: Potential capacities of technologies in AR6



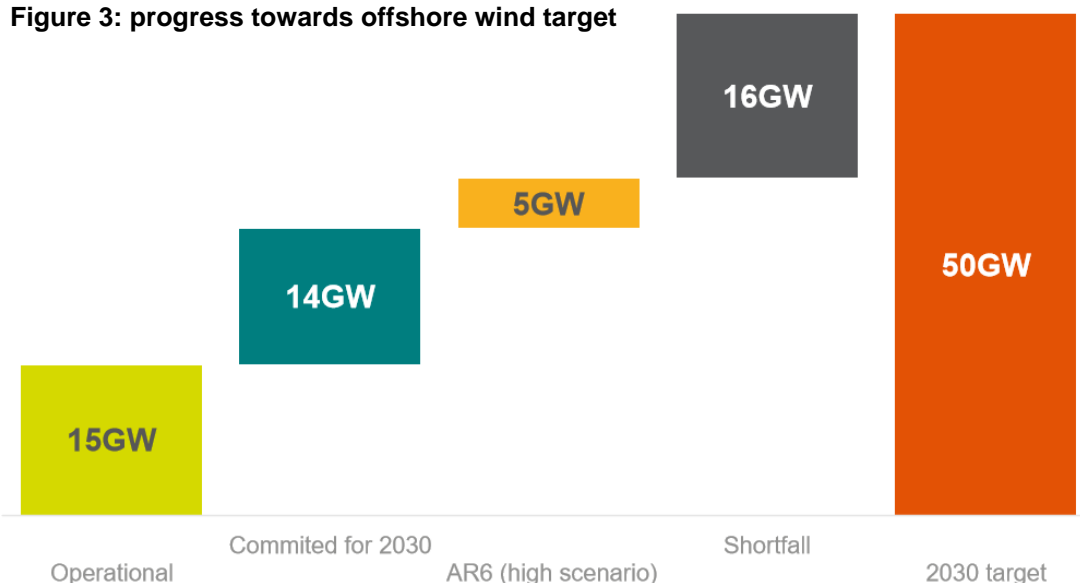
Source: Energy UK analysis of AR6 budget framework, based on a plausible range of potential strike prices and technology mixes

We are closer to achieving our security targets but we have a considerable way to go

As set out in previous [Energy UK analysis](#), the AR6 and AR7 CfD auctions need to secure 21GW of offshore wind between them for the UK to hit the Government’s energy security target of 50GW of offshore wind by 2030, more than 10GW per round. The AR6 parameters make it unlikely that this auction will hit half of the required level. This will leave a shortfall of at least 16GW which will be extremely difficult to secure in AR7 alone. Such a huge shortfall will have significant consequences for our energy security, locking in further reliance on imported gas which is subject to volatile prices, whilst making it harder to hit our power sector decarbonisation targets.

There is around 2.8GW of offshore wind capacity which has been removed from AR4 because of reduced/terminated contracts. Some of these will bid into AR6, meaning that a significant portion of the budget is likely to be used to ensure that already committed capacity can deliver, rather than securing new capacity, making it even harder to hit the 50GW energy security target.

Figure 3: progress towards offshore wind target



Source: Energy UK analysis of The Crown Estate and RenewableUK, rounded to nearest GW.

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This represents a vital investment in our energy security, and our economy

Building the infrastructure we need to meet our ambitious renewable energy targets requires substantial investment, most of which will come from the private sector. We need to unlock billions of pounds of capital to ensure the maximum number of eligible energy projects can secure a contract to generate clean power.

What are the solutions?

While AR6 is the largest renewables budget announcement by the Government, and will contribute towards delivering our targets, Energy UK's analysis shows the UK is still likely to fall short. Therefore, our recommendation is to:

- **Increase the budget:** it is standard for the Government to review market conditions and revise budgets as the auction approaches. The outcomes of AR4 (with its cancelled projects) and AR5 (with no offshore wind bids), as well as continued global volatility, makes the pipeline of projects bidding into AR6 particularly volatile. The Government should increase the AR6 budget in line with market conditions to deliver capacity in line with our energy security targets.
- **Revise other parameters:** the framework uses unrealistic parameters, especially concerning the load factors and reference price. Better aligning these with real world conditions would allow for more capacity to be delivered for a given budget.