Catching the breeze: GB Energy and the future of Offshore Wind

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As we move into a blustery autumn here in London, a similar period of change looks to be taking place in the offshore wind industry. The past few weeks have seen a flurry of activity both in the UK and around the world. Dominating the recent headlines has been the UK Government's announcement of the results of CfD AR6[1] on 3rd September 2024. The sector had been watching the outcome of this auction round with some trepidation, following the disaster of AR5, where no bids for offshore wind projects were received. However, after the new government increased the budget for the round to £1.5bn (up from £227 million for AR5), the result was the highest number of projects receiving funding in a single round of allocation since the scheme began. 131 projects were awarded across a wide range of technologies (the vast majority being solar) and representing a total capacity of 9.6GW. This included 10 offshore wind contracts (9 fixed and 1 floating), accounting for nearly 5.3GW of capacity.

A few days later, on 5th September 2024, the Great British Energy Bill had its second reading in the UK Parliament, passing with 348 "*ayes*" to 95 "*noes*". The Bill is intended to establish a new, publicly owned company ("GB Energy") designed to invest in renewable sources and technology, backed by £8.3bn in funding. Its priorities include working with private partners to co-invest in new technologies and helping scale up UK supply chain capacity.

Looking more globally, that same day the Biden-Harris administration announced approval of the Maryland Offshore Wind Project (the nation's tenth commercial scale wind energy project) which is intended to generate over 2GW and power over 718,000 homes. In China, Mingyang Smart Energy also recently announced the installation of "*the world's largest single-capacity offshore wind turbine*" in a project in Hainan. The power output of the new turbine is up to 20MW, 2MW higher than the previous best. For reference, the average for offshore wind projects is currently in the range of 8-12MW.

Challenging times

But these events, and many like them, come off the back of a tough few years. There has been over $40bn of delayed CAPEX worldwide in offshore wind since 2023. In particular, increased base metal prices and higher interest rates have put pressure on all but the most robust of business cases. Geo-political instability has only made the situation worse. Projects have been cancelled, and emerging markets have struggled to gain a firm footing. As the second largest market in the world, and accounting for over 20% of global offshore wind capacity, the development of offshore wind in the UK is being watched closely, and lessons learnt from its experiences as one of the market leaders in such challenging times are widely sought.

After 14 years of Conservative rule in the UK, the new Labour government has made clear its ambitions for offshore wind. However, while the industry is cautiously optimistic about the government's plans for GB Energy, there are concerns about lack of clarity and focus. It remains unclear how the government intends to ensure that the necessary rapid industrial growth can be

achieved so that the UK supply chain can meet demand in a cost effective and sustainable manner. While the results of AR6 are welcomed, they will not be sufficient to meet the new 2030 net zero targets without a significantly larger AR7 in 2025. There are rumours that the government will loosen its ambitious targets as a consequence, rather than run the risk of failing to meet them. This would be a shame.

Growing efficiently

More generally, the problem remains one of conflict between a desire for brisk expansion, and the challenges inherent in undertaking such a massive exercise. Investment in the supply chain is obviously crucial, but a skills revolution is also required. There are currently around 35,000 people in the offshore wind industry in the UK, but more than 100,000 people will be needed by 2030 in order to meet the targets. Education, and a focus on STEM[2], is therefore essential. Young people, often passionate about climate change and the environment, need to be encouraged to recognise that one of the best ways to actually effect change is to work in the renewables industry itself. Similarly, education can change public opinion and help local communities understand the benefits for them of such projects.

But the issues for growth are also practical ones. Monopiles are currently being installed which are bigger than Big Ben. The need for rapid development of ports capable of dealing with them is well recognised. In addition, very few vessels exist that can deal with handling such huge equipment. Some estimates suggest that globally the demand for wind turbine installation vessels will rise from 11 in 2021 to 60-65 in 2030, not accounting for the demand in China. This is a bottleneck that can only be widened by building new vessels. Investing in a newbuild is a gamble, however, while the dimensions of turbines and components continue to grow and at a time when demand for vessels generally is high and, as a result, the order books at many shipyards are full until 2027. Getting the shipbuilding contracts right from a drafting perspective will also be a key challenge going forward. The developing technological requirements for the transportation and installation of fixed and floating wind farms will mean increased risks of design and construction issues with the cutting-edge vessels intended for such work.

Contracting carefully

For the projects themselves, the problem of the fair allocation of risk remains a focus of discussion. They are inherently complex, challenging (both technically and practically) and expensive endeavours. Unforeseen weather conditions can play havoc with the best laid plans. The lack of availability of installation vessels mentioned above can lead to lengthy and costly delays. The traditional method of working with adapted versions of FIDIC or LOGIC standard contracts has long been recognised as being inefficient and far from ideal. The ongoing development of standard forms for use in the offshore wind market by organisations like BIMCO, OEUK (LOGIC), FIDIC and IMCA (who published the first standard transport and installation contract for the industry in November 2023) has been welcomed. While it is inevitable that any standard form contracts will be amended on a project-by-project basis, it is to be hoped that generally they will increase certainty, reduce risk and thereby costs.

From a legal perspective it is clear that all of the above will require careful drafting of contracts, and a mutual recognition of the need for risk and cost to be fairly apportioned. Fast growth should not mean cutting corners, particularly when it comes to ensuring contractual obligations and liabilities are clearly and coherently set out.

Looking forward

With respect to the UK's capacity more generally, the industry has welcomed the 2024 Industrial Growth Plan commissioned by Renewable UK, the Offshore Wind Industry Council, The Crown Estate and the Crown Estate Scotland. The plan sets out something of a road map (or, as one conference attendee recently put it "*a North Star to follow*") for a rapid increase in manufacturing capacity and developing the UK Supply Chain, so that it can better meet the coming demands from this anticipated growth. The government will hopefully read it carefully and prioritise its investments accordingly. Britain has the ability to lead the world by example and export its innovation and expertise globally, but the market will not wait too long for it to do so. As Polonius said to Laertes: "*The wind sits in the shoulder of your sail, and you are stay'd for*". The potential is great so long as the UK Government and GB Energy get on board in good time to take full advantage of these more favourable winds.

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[1] For any readers not familiar with the terminology: Contract for Difference Auction Round 6. Explaining the CfD scheme is outside of the scope of this article, but the key point is that without viable financials being set by the government in the auctions, developers cannot come up with viable proposals. The auctions are for all low carbon energy generation projects, including solar and onshore wind.

[2] Science, Technology, Engineering, and Mathematics