RWE

# Navigating the Future of Offshore Wind

By Danielle Lane, Director of Offshore Wind Development (UK and Ireland)

RWE Reflections

**Over a year on from the publication of the UK's Offshore Wind Champion report and weeks away from a General Election, Danielle Lane, RWE's Director of Offshore Wind Development (UK and Ireland) spoke yesterday at Global Offshore Wind 2024.**

Here, Danielle reflects on the key themes from the conference, including the challenge of minimising costs for electricity consumers as households face rising costs of living, against a backdrop of an increasingly complex and costly regulatory environment.

---

The UK offshore wind industry has long been a cornerstone of the country's renewable energy sector, and RWE is proud to be at the forefront of this transformation. RWE is the leading power generator in the UK, producing around 15% of the nation's power. We have ten offshore wind projects in operation, and ten further projects in construction or development, totalling over 11GW.

This puts us front and centre of what could and should continue to be a major UK success story. But it also means we are acutely aware of the challenges that need to be addressed if the UK is to realise its full potential.

# Historically, we have all shared a common goal

I had the pleasure of speaking at Global Offshore Wind 2024 again this year. It is a fantastic opportunity to get together as an industry to celebrate success - and until recently, I am proud to say that one of the key successes we have celebrated is cost reduction. Between CfD allocation round 1 and 4 (2015 to 2022) offshore wind strike prices fell by 68% from just under £120/MWh to £37.35/MWh (2012 money).

This success is due to the fact that historically, the shared focus of both government and industry has largely been on innovation and cost minimisation.

However, in recent years we find ourselves in a new world. At RWE, between 2021 and 2023 we saw investment costs increase between 30-40% for comparable UK and European offshore projects.

Unfortunately, last year's 5th CfD auction parameters did not properly reflect or account for the supply cost pressures that industry were facing – therefore, no offshore wind projects bid into the auction. This was a huge missed opportunity for the UK. We now risk losing our place as one of the leading places to invest in offshore wind globally.

The reasons for supply chain cost pressures are well-documented and not unique to the UK or indeed the offshore industry – the ongoing war in Ukraine and higher rates of interest and inflation have had far-reaching consequences for both businesses and households all over the world.

Against this global backdrop, arguably it is therefore critical that collectively we are ever-more focused on minimising the cost of electricity to the consumer.

**This success is due to the fact that historically, the shared focus of both government and industry has largely been on innovation and cost minimisation.**

# More recently we have faced a more complex and costly regulatory environment

Increasingly projects must now meet multiple additional criteria through the consent, leasing and CfD processes which are not mutually supportive, leading to inefficient policy outcomes and a greater overall cost burden on projects compared to a joined up approach.

RWE is a responsible developer and we take pride in the fact we have a strong track record of engaging with our local communities when consenting our projects. The planning approval process for offshore wind is long and at times challenging – reflecting the complexity and scale of the projects that we are building. For example, at 108 meters, each blade on the 100 turbines we plan to install at our Sofia wind farm, currently under construction 195km off the north east coast, is longer than a football pitch!

Therefore given their sheer size, it is important that we ensure that our projects do not have a detrimental impact on the local environment, and we are committed to achieving this through the consenting process.

Indeed, rather than having a detrimental impact, it is arguable that offshore wind considerably enhances the natural environment. There is a wealth of data showing the positive benefits of the presence of assets in the marine environment – from reef effects, increased marine ecology and refuge areas. This is in addition, of course, to the impact of reducing emissions and tackling climate change; which undoubtedly is the biggest threat we face to our natural environment.

Yet there is scope and expectation to do more. We look forward to further detail on the proposals for a 'Marine Recovery Fund' that will oblige developers, as part of their consent, to make strategic compensatory measures to make lasting tangible improvements to the marine environment. These measures may include, for example, habitat restoration and creation, or the provision of artificial nesting for seabirds, and may not necessarily be local to the project itself. Such measures will, of course, come at a price for developers although it is unclear at this stage what the impact will be until we have seen further detail.

In addition, from 2025 we expect the introduction of mandatory noise abatement systems, that will be required for all piling activities to protect marine mammals from excessive noise, this will further add to construction costs.

Balancing the need for environmental mitigation and cost minimisation, the planning process must be proportionate. It should also be collaborative. Importantly, we must avoid imposing consent conditions at the point of planning approval without consultation – this will only exacerbate risks, and unnecessarily further add to costs for developers.

There is also the important issue of who is best placed to deliver mitigation. For example, one consent condition requires offshore wind farms in line of sight of defence and civil national radar systems to reach agreement with the Ministry of Defence and NATS as to their impact on radar coverage. In his report to Government in March 2023, the Offshore Wind Champion Tim Pick recommended that the Government should consider whether it remains appropriate for developers to fund radar mitigation schemes on the basis of the existing "polluter pays" principle, especially given the scale of radar upgrades now required. Arguably, these costs – incurred for national requirements of air defence and air traffic control - should not be placed on individual projects but be dealt with at a national level by government to ensure the most efficient procurement and best value for the UK.

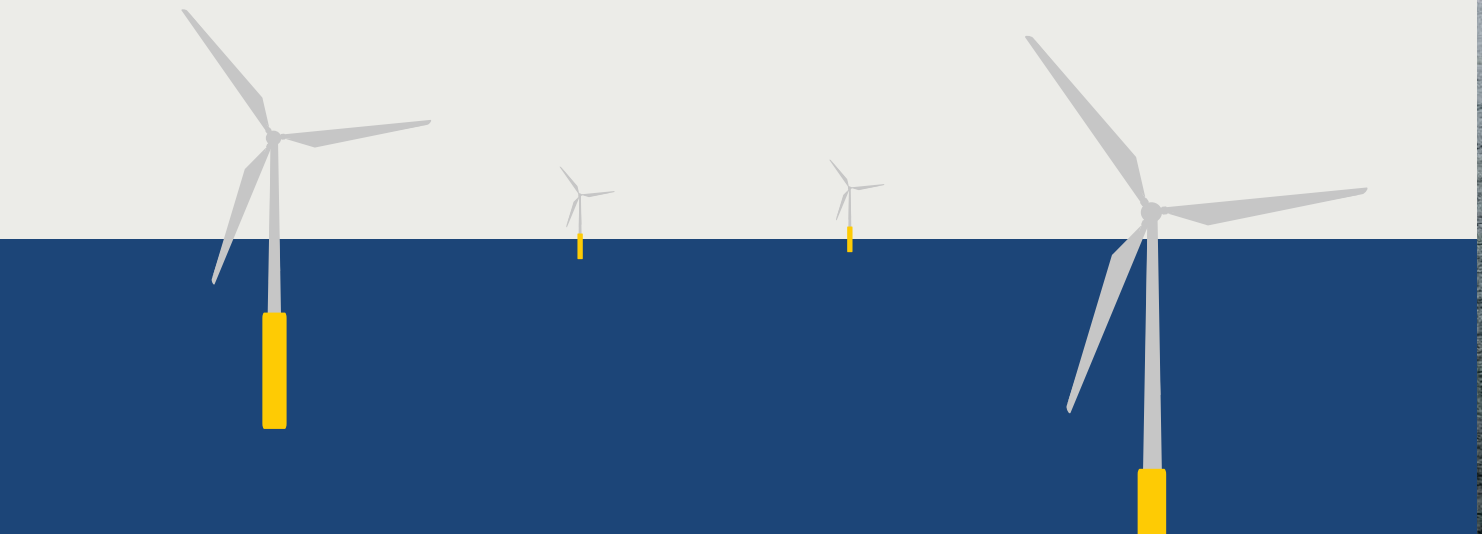
The cost of the seabed lease is also an important factor in overall project costs. The last leasing auction, Round 4, saw a large rise in options fees that will eventually need to be passed on to consumers through CfD bids. Looking forward to Round 5, we also expect to see greater obligations being placed on developers covering supply chain, local skills and infrastructure use. Whilst these requirements have positive intentions, they will add costs to projects, restrict project flexibility (and speed of development) and are not necessarily aligned to wider government plans, such as the Sustainable Industry Rewards (SIRs) criteria.

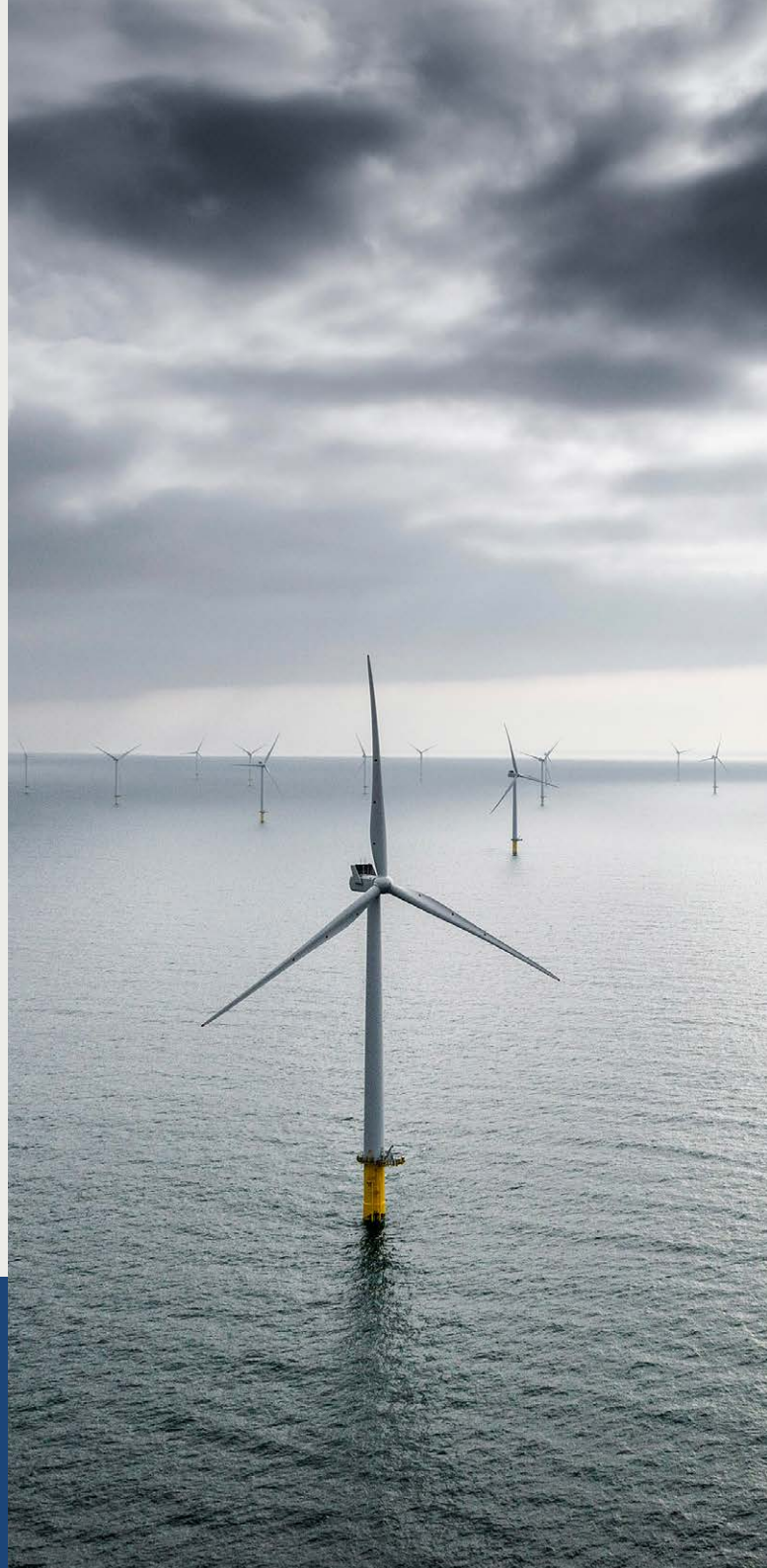
# Using the CfD as a lever for industrial policy adds further complexity

Offshore wind not only can have a positive impact on the natural environment – it also can bring prosperity and economic growth. There are enormous potential economic rewards for the UK if we're able to grow the supply chain in the right way. The sector's Industrial Growth Plan (IGP) begins to set out how some of this could be achieved and sets out a vision for tripling offshore wind manufacturing capacity over the next ten years.

Recently, the government has also legislated to introduce 'non-price factors' into the CfD auction through the 'Sustainable Industry Rewards' or SIRs approach. From allocation round 7 (AR7) projects must commit to a minimum standard of £100m/GW towards SIRs initiatives, such as Investment in Tier 1 UK manufacturing or ports in deprived areas. For commitments over and above this level, developers are able to participate in a SIRs auction to be awarded compensation.

Whilst RWE fully supports the overall policy objectives to grow the supply chain and increase delivery capacity, doing so in this way means that developers effectively become a conduit for subsidies passing from government to the supply chain. Inevitably, this brings additional risk and costs for developers, with many of these beyond their control. Arguably, it would be more efficient and transparent to target subsidy directly where it is needed with the supply chain – such as the proposed GIGA fund announced in the Autumn Statement last year.





# Maintaining the UK's success in offshore wind

The potential for the offshore wind industry to drive economic growth and accelerate the green transition is immense. As an industry we are prepared to deliver the projects needed to speed the transition and deliver green jobs. But we must be honest that this will potentially come with increased cost burdens if we move away from our historic common goal of innovation and cost minimisation.

As offshore wind is now an established technology, we no longer expect to see year-on-year cost reductions in real terms. However, this does not mean that electricity consumers will be 'worse off' the more we deploy. Indeed, recent analysis by Aurora, commissioned by RenewableUK shows that the lowest cost electricity system by 2035 is one dominated by offshore wind.

Therefore it's clear – if we stay focused and all pull in the same direction, there's a huge prize – not only benefiting bill payers, but also economic growth, prosperity, lower emissions, and energy independence for the UK.

**uk-ireland.rwe.com**