An overview to Offshore Leasing Round 5: Floating wind in the Celtic Sea



Introduction

The Crown Estate works across communities, cities, countryside, the coast and the seabed, with the responsibility – and opportunity – to play our part for the benefit of the country, its finances and its future.

As manager of the seabed, we work with industry and stakeholders to unlock its potential to support the nation's transition to a resilient, sustainable and decarbonised future. A key part of this is making the seabed available for the development of offshore wind, in support of the UK's net zero and clean power targets.

Floating wind is at the cutting-edge of renewable energy technology and, through Offshore Wind Leasing Round 5, we will see a new chapter in the UK's green growth.

This document explains our role in delivering floating offshore wind farms in the Celtic Sea, off the coasts of South Wales and South West England.



What is floating offshore wind and why is it important?

Over the last 20 years, offshore wind has grown to become one of the most important ways of supporting the UK's transition away from fossil fuels. In fact, the UK is now home to one of the largest and most successful offshore wind markets in the world, with enough energy to power around half of all UK homes in 2023.

However, in order to continue this journey and create enough offshore wind capacity to achieve our Net Zero goals, we need to be able to use areas of seabed which are further offshore in waters where the wind is stronger and more reliable.

Deploying wind turbines using current fixed foundation technologies becomes more challenging in deeper waters beyond around 60m; this means that to maximise the potential of offshore wind, we need to look to new technologies such as floating wind farms. These involve mounting turbines on floating platforms, which are then towed out to sea and anchored to the seabed.

Round 5 is specifically targeted at floating offshore wind to help develop the UK's capabilities in this new technology and establish a new market in the Celtic Sea. The technology involved with floating offshore wind differs significantly from traditional fixed-base turbines and with very specific supply chain and onshore infrastructure requirements.

What is happening in the Celtic Sea?

We are in the process of leasing three large sites – referred to as Project Development Areas (PDAs) – in the Celtic Sea to developers, for the creation of floating offshore wind farms.

The Crown Estate first set out plans to create new floating wind farms in the Celtic Sea in 2019. We then spent the next few years conducting extensive research and stakeholder engagement, to ensure we could bring the best opportunity possible to market, taking into account the many competing demands on the seabed and the potential impacts on the environment and nature.

At the end of 2023, we published an Information Memorandum detailing our final proposals for three sites which could host new floating wind farms. These sites are roughly of equal size, and each has the potential to generate up to 1.5 gigawatts of renewable energy – that's enough to power more than 4 million homes in total.

We are now in the process of leasing these three areas of seabed, which essentially means making them available to offshore wind developers to bid for the sites, to then build and operate floating wind farms there.

This leasing process is planned to run until Summer 2025, when the successful bidders are expected to enter into legal agreements with The Crown Estate to develop the sites.

Turbines could be up to 300 meters tall (almost as tall as The Shard in London) and mounted on platforms which can be the same size as a football pitch.

What does this mean for communities?

The Crown Estate <u>published research</u> which showed the new Celtic Sea floating windfarms could create up to 5,300 jobs during the construction phase and deliver £1.4 billion of economic benefits to the UK.

The new floating wind farms will be around 40km (approx. 25 miles) off the coast. However, offshore wind farms require a significant amount of work to assemble and operate, which in turn means major onshore operations and new infrastructure. For floating wind farms in particular, there is a need for specialist ports which can mount the turbines on the floating platforms before they are towed out to their final location to begin generating electricity.

As part of the tender process, Bidders were asked to reach initial agreements with the ports they'd use if they were successful. Eligible Bidders who have been invited to the final stage of the tender process have identified several potential options for ports around the Celtic Sea to help deliver their projects. You can read further details here.

This creates a huge opportunity for communities around the Celtic Sea to benefit from the new skills and jobs which will be required to get the new wind farms up and running.

How is The Crown Estate supporting the process?

Floating offshore wind is a new technology and hasn't previously been used on the scale being planned in the Celtic Sea. As a result, The Crown Estate has taken a number of steps to help reduce some of the risks developers might face when looking to deliver the new wind farms.

This has included working closely with the National Energy System Operator (NESO) to make this the first leasing round to come to market with an agreed plan for connecting the new windfarms to GB's electricity grid – providing greater clarity for bidders and potentially saving many months from their development timelines.

Other steps we've taken include:

- Working with UK Government to agree the sites in advance, taking into account other uses for the seabed in this area
- Carrying out a major programme of surveys early in the process to give greater visibility of the physical and environmental properties of the three sites
- Carrying out an important Habitats Regulations
 Assessment ahead of the auction for the three sites

We have also set up a new Supply Chain Accelerator Fund to support companies looking to invest in the supply chain that will be needed to deliver the new wind farms. We recently announced that we would be awarding £5m in matched funding to projects to enable floating wind platforms, anchoring and mooring systems, operations and maintenance facilities, test facilities, and those supporting the skills transition.

What impact is this going to have on the environment?

In order to reduce the potential environmental impacts of Round 5 – in line with our Nature Recovery Ambition – we have made sure we have properly built in consideration of the environment into the leasing process. This has included:

- Engaging with environmental stakeholders and integrating the environment into our selection and design of the wind farm sites. This included using key environmental data in our spatial modelling, alongside reviewing data and research provided by our environmental stakeholders when selecting our Project Development Areas.
- Undertaking an up-front Habitat Regulations Assessment to assess the potential for Round 5 to impact on areas that have been designated for the protection of habitats and species. This concluded that protected environmental sites will not be adversely affected.
- Successful bidders will be required to submit a plan demonstrating how they will contribute to improved health and resilience of the marine environment in the Celtic Sea region.
- We have shared with Bidders a list of potential interventions to help shape their plans, including habitat restoration and pollution reduction, as well as opportunities to fill data and evidence gaps.



A core focus of Round 5 is to create new opportunities for skills and employment. In 2024, The Crown Estate began a <u>partnership with the Sea Ranger Service</u>, a social enterprise designed to give young people their first experience of a maritime career. Through this partnership, a number of cadets were recruited to spend time at sea carrying out important wildlife surveys around the sites of the new windfarms. You can find out more about this partnership in this video.

What more needs to be done?

This is a once-in-a-generation change to the UK's ability to generate its own clean energy and will require everyone to work together to make it a success.

The Crown Estate has designed a leasing process that encourages developers to commit to new social and environmental opportunities alongside the development of their new windfarms. Proposals submitted by Pre-Qualified Bidders as part of Invitation to Tender Stage 1 therefore included a series of commitments to activities such as new training or apprenticeship schemes and community impact, as well as a net positive outcome for the environment through different nature restoration projects.

We continue to work hard with local and national governments, as well as the offshore wind industry and organisations such as NESO, to ensure the UK's offshore wind market remains as attractive as possible for investors.

What's next

Our leasing process has been carefully designed to ensure we get the most out of the developments for the nation, and this has several stages.

The leasing process can be broken down into four key stages:

1. Pre-Qualification Questionnaire (PQQ):

This first stage began in February 2024 and assessed potential bidders' technical capabilities as well as their legal and financial standing. Bidders were informed of the outcome in July 2024.

2. Invitation to Tender Stage 1 (ITT1):

This stage commenced in August 2024 and required Prequalified Bidders to set out details of how they will develop their wind farms, including how they intend to support new onshore opportunities such as jobs and supply chains, and which ports they intend to use.

Lifecycle of offshore wind



3. Invitation to Tender Stage 2 (ITT2):

Eligible Bidders have been invited to take part in an auction for the three sites in Spring 2025. In line with international best practice, bidders will have full transparency of the bidding price for each site as the auction progresses to ensure winning bids reflect the true market value.

4. Entry into Agreement for Lease (AfL):

Winning developers are expected to sign AfLs and receive the seabed rights for the three sites. Subsequent steps to take the projects into development are set out in the diagram above and are overseen by other organisations, including the Government and NESO, in consultation with statutory consultees.

To find out more about this leasing round, please visit our website.

If you have any questions or would like to discuss Round 5 further, please contact the team at:

