

DEVELOPMENT AND CONSENTING CHALLENGES AND OPPORTUNITIES



PROJECT SUMMARY

Floating offshore wind will be key to delivering a cost-effective Net Zero for the UK. Over the next 10 years, it is estimated that a total of 15GW of floating wind projects will need to be leased, with the potential for just under 2GW installed by the end of 2030 and 7.5GW by the end of 2035, to play its part in the delivery of 100GW of offshore wind by 2050, as suggested by the Climate Change Committee.

In order to deliver the rapid scale-up and commercialisation of floating wind required, we need a strong, long-term pipeline of project activity.

Absolutely critical to the development and delivery of these floating wind projects is a robust, collaborative, timely and efficient development and consenting process. Whilst floating offshore wind has many similarities with fixed bottom wind, it has a number of key differences. These include more extensive and dynamic subsea infrastructure (mooring and dynamic cabling systems), the ability for the turbines to move within the confines of their station keeping systems and their deployment in new regions and areas of the marine environment, which are not suitable for fixed bottom wind.

In addition to these differences, the sheer scale of the development activity, in parallel with fixed bottom wind, provides a number of development and consenting opportunities and challenges for all stakeholders.

Ralph Torr, Programme Manager at the Offshore Renewable Energy (ORE) Catapult, said:

“It is vital the UK takes a strategic approach to supporting the rapidly developing floating wind industry to ensure the potential benefits are realised. Collaborating with industry and academia will help de-risk and encourage innovation throughout the supply chain.”

The Project

In order to help support the floating offshore wind industry and key stakeholders to deliver this pipeline of project activity, the [Floating Offshore Wind Centre of Excellence \(FOW CoE\)](#) launched the Floating Offshore Wind Development and Consenting Opportunities and Challenges Project in the autumn of 2020.

The objectives of this project are to:

- Identify the challenges and opportunities associated with the floating offshore wind development and consenting process.
- Scope a range of collaborative enabling activities which would address the challenges and exploit the opportunities.

Floating Offshore Wind Centre of Excellence

In an effort to boost the UK’s floating offshore wind industry, ORE Catapult has established the Floating Offshore Wind Centre of Excellence (FOWCoE) to develop an internationally recognised initiative to reduce the cost of energy from floating wind.

The Centre will accelerate the build-out of floating farms, create opportunities for the UK supply chain and drive innovations in manufacturing, installation and operations and maintenance. The Centre of Excellence is a collaborative programme with industry, academic and stakeholder partners.



WindFloat Atlantic final hookup at Viana do Castelo, Northern Portugal (Credit: Principle Power)

The Outcomes

In delivering these objectives, the project is intended to have a tangible impact on both the timeliness and the cost of deployment, through the creation of efficient process and reduction in schedule risk.

Whilst the project is focused on floating offshore wind development and consenting in the UK, a number of the challenges and opportunities are common with other key floating offshore wind markets.

The project is being delivered by Atkins and ABPmer who have extensive experience in both floating offshore wind development and consenting, and floating offshore wind technology more broadly.

Atkins have completed a review of development and consenting process and approach in the context of its application to floating offshore wind in the UK. Based on this, a targeted stakeholder engagement process is ongoing to define and refine the challenges and opportunities identified and develop the scope of enabling activities which would help address and exploit these.

James Bourne, Project Director for Atkins, said:

“Atkins and ABPmer are delighted to be delivering this project, which identifies practical measures for improvements, synergies and opportunities in FOW’s development and consenting process. We hope the work will demonstrate the critical role FOW can play in progressing the UK’s path towards Net Zero.”

Following completion of the project in April 2021, a summary of the outcomes will be made publicly available. In addition, the FOW CoE will engage directly with key stakeholders to discuss the findings and recommendations, with a view to supporting the delivery of a range of enabling activities within and out the FOW CoE.

Julian Boswall, Partner Burges Salmon LLP and independent advisor to the project, added:

“This project will deliver a very useful road map of consenting issues specific to floating wind to help accelerate large scale deployment, and in turn the delivery of Net Zero”.

For further details on the Floating Offshore Wind Development and Consenting Opportunities and Challenges Project [please contact Ralph Torr, Programme Manager.](#)