

Written evidence submitted by the Crown Estate (GRD0028)

Summary

- The Crown Estate seeks to create lasting and shared prosperity in everything that we do. We firmly believe that the waters off the Welsh coast offer a significant opportunity for offshore wind to benefit Wales and the UK.
- We play a critical role in unlocking the offshore wind market and unlocking the UK's natural resources by managing and supporting the sustainable development of the seabed.
- Successful deployment of offshore renewables is dependent on the feasibility of projects to connect to the grid infrastructure onshore. We are working collaboratively with National Grid ESO to ensure floating wind capacity in the Celtic Sea is included in relevant grid planning processes as early as possible to support connection in a timely way, and to minimise impacts to communities.
- We welcome the work that Ofgem is doing to explore opportunities for anticipatory investment in transmission grids as part of the Offshore Transmission Network Review. Given the Government's targets for offshore wind and the long lead time for the development of grid infrastructure, it is important to incentivise investment so that connecting to the system does not delay deployment.
- We are keen to support the Committee's work in this important area and look forward to discussing these points further in our forthcoming evidence session.

The Crown Estate and our role in Wales

The Crown Estate is a purpose-led business established by statute, with a clear commercial mandate. We work to create shared and lasting prosperity in the way we manage our diverse portfolio, and seek to integrate environmental and socio-economic value creation in everything we do.

Our approach to the management of marine resources in Wales is grounded in partnership, which sees us work together with a diverse range of organisations. This includes collaborating with the Welsh Government and Natural Resources Wales, to understand shared aims and priorities. We also play an active role in advisory groups such as the Marine Planning Stakeholder Reference Group, which looks at strategic resource areas and sector locational guidance.

Our responsibilities in Wales include the seabed out to 12 nautical miles, and our interests therefore include renewable energy, which is our most significant activity in Wales; oil and gas pipelines, marine aggregate extraction, telecommunications and power cables, and aquaculture. In addition, we manage rights to the resources on the continental shelf - the seabed out to 12 miles - such as natural resources and offshore energy, but excluding fossil fuels.

We also own and lease around 65 per cent of the Welsh foreshore and riverbed, which includes a number of ports, such as the busy and multi-functional port of Milford Haven in Pembrokeshire, and various marinas. Inland, we own over 50,000 acres of Welsh uplands and common land, which is primarily rough pasture for grazing, but also acts as an important natural resource for all to enjoy within the Welsh countryside.

Offshore opportunity

The waters around Wales offer a significant opportunity for Wales to lead the transition to net zero.

Fixed foundation offshore wind is now an established technology with a number of operational projects deployed in Welsh waters including North Hoyle, Rhyl Flats and Gwynt y Môr off the coast

of North Wales. A further approximately 600 MW of capacity is under development with Awel y Môr, and a further 1.5 GW subject to plan level Habitats Regulations Assessment.

In July 2021, we were pleased to announce that the Llŷr 1 and Llŷr 2 floating wind Test & Demonstration projects comprising two separate 100MW sites, were given the green light to progress to the plan-level Habitats Regulations Assessment stage of the development process. The projects are intending to test new foundation and mooring technologies, using new designs, materials and construction approaches and could play an important role in supporting the development and momentum of the regional supply chain, helping support new jobs, skills and economic growth.

To further support the development of the floating offshore wind sector beyond Test & Demonstration scale, in November 2021 The Crown Estate committed to unlocking up to 4GW of new floating wind capacity in the Celtic Sea by 2035. We are continuing to engage with the market and stakeholders to refine the design of a programme that delivers for the environment, for society and for the economy.

Wales also has significant wave and tidal energy potential. A particular example is Menter Môn, a social enterprise in Ynys Môn developing the Morlais tidal stream project, leasing 35km² of seabed, with the potential to generate up to 240MW. We recently announced a £1.2 million investment to support the project to deliver its environmental monitoring and mitigation package (EMMP) – an essential step in safeguarding the marine environment and enabling the project to progress. The work will monitor for interactions with sensitive species as well as testing ongoing monitoring technologies. Crucially this work will be applicable to any tidal stream device deployed at the site and therefore represents an important step in addressing significant evidence gaps and consenting challenges faced by the current data poor tidal sector.

We look forward to continuing to work with UK and Welsh governments in partnership to support their renewable energy and net zero ambitions, and to working with the organisations responsible for critical enabling infrastructure – electricity network operators, ports authorities and the supply chain.

Grid capacity

Delivering the scale-up of offshore renewables required to support the clean energy transition will place substantial demands on infrastructure, for example in terms of ports and the electricity grid – both of which are key enablers to support delivery. We note that a recent report commissioned by the Welsh Government¹ identified that significant investment in the onshore electricity grid will be required for the connection of future offshore generation capacity. We are supporting work by BEIS and Ofgem to help address this through initiatives such as the Offshore Transmission Network Review (OTNR) and welcome in particular recent moves to allow anticipatory investment² in grid infrastructure necessary to connect offshore wind.

Whilst we are not directly responsible for the connection of offshore renewables to the transmission system, we have a key role in the provision of seabed rights for both the generation and the offshore transmission infrastructure assets. Given this role, we are strategic partners in the BEIS led OTNR. This major policy review provides an excellent opportunity to transform the way offshore generation

¹ [Offshore wind and grid in Wales report: non-technical summary \(gov.wales\)](https://gov.wales)

² [Update following our consultation on changes intended to bring about greater coordination in the development of offshore energy networks \(ofgem.gov.uk\)](https://ofgem.gov.uk)

connects to the transmission system, moving from point-to-point radial connections to more coordinated solutions which, according to National Grid ESO³, can be more cost effective and cause less disruption to onshore communities. To deliver this fundamental change, we recognise that a number of parties, including ourselves, need to review how we discharge our responsibilities to support the overall objectives of the OTNR.

To this end, in August 2021, we entered into a Statement of Intent (Sol) with National Grid ESO to support our collective activity under the OTNR. This Sol provides a framework to enable collaborative activity on areas of common interest, in support of delivering more coordinated grid connection solutions. This includes reviewing whether and how our respective processes can be better aligned to support the acceleration of offshore wind through to exploring how network considerations can be incorporated more explicitly in our leasing processes.

In respect of the Celtic Sea, we are working together to establish an approach which enables the initial outputs from the ESO's Holistic Network Design (HND) in the region to inform our analysis and decisionmaking on issues such as capacity and site selection. We expect that these decisions would then be subject to further network design activity, thus creating an iterative process between the intended deployment of generation and network development. This is a new way of working for both parties and we expect it will help support more optimised outcomes in both generation and transmission in the Celtic Sea region.

Collaboration to address strategic energy and marine issues (including cumulative impacts)

The Crown Estate collaborates with a wide range of stakeholders to address strategic energy and marine issues. Our pioneering Offshore Wind Evidence and Change (OWEC) programme seeks to drive the sustainable and coordinated expansion of offshore wind whilst supporting biologically diverse seas. OWEC's work is shaped by the Programme Steering Group which includes the Welsh Government and Natural Resources Wales.

Over a five-year period, the programme seeks to drive sustainable and coordinated expansion of offshore wind through funding a number of strategic research and data projects. These projects will provide essential insights to help the sector and policy makers better understand and address environmental considerations and interactions with other industries and activities, both around the coast and offshore.

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³ [download \(nationalgrideso.com\)](https://nationalgrideso.com)