

Written evidence submitted by The Crown Estate (REW0040)

Summary

- The Crown Estate firmly believes that Welsh waters offer a significant economic and environmental opportunity for the country. There is potential to generate a substantial proportion of the nation's clean energy needs by developing established technologies, such as offshore wind, as well as making Wales a leader in innovation to support new renewable technologies.
- In light of the UK's net zero target, and the Energy White Paper, the scale of development that we are likely to see across Welsh waters has grown significantly. The seabed is getting busier, and a new approach is needed to optimise the environmental, economic and social potential of the seabed.
- This requires coordination of those who play a part in how the UK's marine environment is used. A more holistic approach of all existing and new demands on the seabed is required, ensuring we balance the need for short-term speed to meet ambitious targets, with:
 - Maximising the long-term green and economic potential of our seas
 - The needs of others users of our increasingly busy sea
 - The need to be sensitive to how we manage and mitigate environmental impacts.
- As manager of the seabed, and with responsibility for awarding seabed rights across England, Wales and Northern Ireland, The Crown Estate is committed to playing our part in helping maximise the renewable energy potential in Wales in a sustainable way.
- Our response is structured as follows
 1. The Crown Estate's role in supporting the development of renewable energy in Wales
 2. Renewable potential of Wales
 3. Supporting the future development of renewable energy projects in Wales

Crown Estate's role in supporting the development of renewable energy in Wales

The Crown Estate is a purpose-led business established by statute, with a clear commercial mandate, and accountable to Parliament¹. Our portfolio includes a diverse collection of marine and land assets across Wales. This includes the seabed out to the coastal state boundary, as well as 65% of the Welsh foreshore and riverbeds and around 27,800 hectares of Welsh common land.

Tackling the climate emergency is at the heart of all that we do as a business. We have recently committed to become a net zero business by 2030, and climate positive thereafter.

As well as decarbonising our own real estate portfolio across Wales, England and Northern Ireland, we also have a responsibility to support the nation's wider net zero agenda through

¹ Delivering against the mandate set by Parliament, The Crown Estate returns 100% of our net revenue profit to HM Treasury for the benefit of the nation's finances. We have generated £2.9bn over the last ten years.

our role as manager of the seabed. In this capacity, we are responsible for awarding seabed rights for renewable energy developments, including offshore wind, wave/tidal and Carbon Capture Usage and Storage (CCUS) as well as a range of other activities including aggregate extraction and telecommunications cables.

As the nation looks towards a net zero future in 2050, it becomes all the more important that we consider the nation's offshore ecosystem holistically, understanding the diverse uses of our increasingly busy seas, and being sensitive to environmental impacts of new development. In this context, we know we have a key role to play in how we work together in Wales and across the UK, to optimise the use of the seabed so that we realise its potential, socially, environmentally and economically. We continue to build on our strong relationship with Welsh Government and Natural Resources Wales in the sustainable management of the seabed.

Renewable potential of Wales

Welsh waters are ideally placed to play a significant role in the UK's net zero transition. Working with developers, the Welsh and UK governments, we have already begun to see substantial growth in offshore renewables around Wales over recent years.

Offshore wind: We have recently run a major offshore wind leasing round, a competitive tender process developed in partnership with UK and Welsh governments and stakeholders. In a major vote of confidence in the UK's green economy and net zero ambitions, we announced six potential offshore wind projects around England and Wales². Demonstrating the strong renewable potential of Welsh waters, one of the new projects is off the Northern Welsh coast, North East of Anglesey. This site has been secured by a partnership between BP and German energy firm EnBW and has a total of 1500 MW proposed project capacity in Welsh waters. This project will now progress to the environmental assessment phase – subject to the outcome of that, this new offshore wind site could start generating clean energy for Wales before the end of the decade.

Welsh waters are already home to one of the largest wind farms in the UK, Gwynt y Môr, based off the north coast of Wales. It is making a significant contribution to the UK's total offshore wind capacity. Run by RWE, Gwynt y Môr, with an installed capacity of 576 MW, generated 1.9TWh of electricity in 2020. Gwynt y Môr created over 700 jobs during construction and over £90 million was spent within Wales. Since becoming operational, 100 long term, skilled jobs have been created with the wind farm typically investing around £8 million into the Welsh economy each year³. In August 2020, we also awarded seabed rights to expand Gwynt y Môr. The expansion project, Awel y Môr, will double the capacity of the project.

Floating wind: In August 2020, we were pleased to announce the award of seabed rights to developer Blue Gem Wind for the proposed 96MW Erebus floating wind project in the Celtic Sea. This is the first time that rights have been awarded for floating wind anywhere in Welsh,

² For more information, see [here](#).

³ <https://www.renewableuk-cymru.com/2020/11/gwynt-y-mor/>

English or Northern Irish waters, creating a new opportunity to unlock new, deeper areas of the seabed that are not suited to the 'fixed' foundations of traditional wind turbines.

We also recently ran a market engagement process on the market's appetite for floating offshore wind, with an eye on how best to bring forward larger 'early-commercial' scale projects. We aim to help enable the Government's target to deliver 1GW of floating wind 2030. It is clear that there is significant market appetite and capability to progress floating wind. We are currently reviewing the market engagement results and exploring how to move forward in a way that enables the growth of this new sector. In doing so, we will look holistically at the wider ecosystem of the seabed to ensure we adopt an approach which optimises the long-term potential of the seabed; maximises net zero potential; drives local economic benefit; is sensitive to the biodiversity in our marine environment; and manages impacts on other users of the sea. We will seek to ensure that the decisions we make in regard of seabed rights for floating wind work in parallel with UK Government arrangements for revenue support; with the aim of creating a 'coherent' route to market for new floating wind projects.

Wave and tidal stream: Wales harbours significant wave and tidal energy resource potential. The Crown Estate currently has five live seabed agreements for demonstration-scale projects, with two more due to be signed this year. We are also starting to think about how we can support emerging technologies that will be vital to the net zero challenge, including hydrogen and CCUS.

Tidal range: We are in ongoing dialogue with local and national governments on potential for future tidal range schemes. There is scope for these technologies across the offshore environment, including in Wales.

Supporting the future development of renewable energy projects in Wales

Meeting the UK's ambitious net zero and renewables targets requires an exponential increase in renewable energy capacity in all parts of the country. It is a significant challenge that not only requires major investment, but also balancing the interests of others who use the marine space, whilst ensuring protection of habitats and species.

The current policy and regulatory regime has been effective to date in delivering low-cost connections. With increased ambition, such as the target for 40GW offshore wind by 2030, and 100GW or more by 2050⁴, the seabed is getting busier all across the UK and a new approach will be needed if we are to meet our enhanced ambitions in future.

1. Better coordination

To maximise the full potential of the seabed, there is a need for all those who play a part in how the UK's marine environment is used to coordinate their activities. This should cover all nations – including Wales – to look more holistically at all existing and new demands on the seabed, ensuring we balance the need for short-term speed to meet ambitious targets with:

- Maximising the long-term green and economic potential of our seas.

⁴ Committee on Climate Change (2020), Sixth Carbon Budget

- The needs of others users of our increasingly busy sea.
- The need to be sensitive to how we manage and mitigate environmental impacts.

Both the UK and Welsh governments are a critical part of this and The Crown Estate, in partnership with both UK and devolved governments and more than 20 other stakeholder organisations, has recently launched a £25m Offshore Wind Evidence and Change programme (OWEC) in order to support the sustainable deployment of offshore wind. Working with our partners including Welsh government, Natural Resources Wales, BEIS and Defra, we will seek consensus on key evidence requirements and priorities for change to help with strategic planning of the offshore wind development around the UK and to better understand environmental considerations and interactions with other users of the seabed.

As part of OWEC, we are currently working in partnership with National Grid ESO, National Grid Electricity Transmission and the Marine Management Organisation to develop a deeper understanding of the potential terrestrial and marine constraints that future wind farms connecting into the grid are likely to face. The pilot, which is in the East of England, will be a template for further studies elsewhere, including in North Wales.

2. Enabling infrastructure and skills

We believe this partnership approach is central to delivering net zero. However, OWEC will not be sufficient on its own. Development of renewables is dependent on the infrastructure capabilities of the supply chain, as well as the capacity of the grid infrastructure onshore. Supporting renewables therefore involves enabling investment in wider infrastructure in Wales and further afield – such as ports, the electricity grid and supply chain readiness – as well as investment in skills. Building a net zero workforce needs to happen all across the UK and we need work together across the sector to up-skill our workers to sit alongside investment in new technologies.

3. Roadmap to 2050

In order to maximise opportunities for Wales and the UK, we believe a clear route to achieving the 2050 Net Zero targets is required, an offshore 2050 roadmap. Through working with both UK and Devolved Governments as well as industry and key stakeholders, a roadmap could set out a strategic plan for how we provide for a clear and sustainable growth of needed key contributing sectors whilst ensuring environmental resilience and maximising economic benefits through investment in infrastructure and protect other users of the sea. This could be developed in collaboration between all the governments of the UK, and technical experts, to ensure it reflects the interests of and delivers for all communities. This will be a complex task, but will help maximise the potential of Welsh offshore resources, developing renewables in the most sustainable and efficient way. We are already taking steps to ensure we can provide the building blocks for such a roadmap, including our work on future areas for offshore wind and the OWEC programme.

We are keen to support the Committee's work in this important area and would be happy to discuss our submission further if useful.

February 2021