



Blue Gem Wind

Pwyllgor Newid Hinsawdd, yr Amgylchedd a Seilwaith /  
Climate Change, Environment and Infrastructure Committee  
Blaenoriaethau ar gyfer y Chweched Senedd / Priorities for the Sixth Senedd  
PR19  
Ymateb gan Blue Gem Wind / Evidence from Blue Gem Wind

Llyr Gruffydd MS  
Chair of the Climate Change, Environment and Infrastructure Committee  
Welsh Parliament  
Cardiff Bay  
CF99 1SN

8<sup>th</sup> September, 2021

Dear Llyr,

### **Ministerial Priorities in Relation to Climate Change, Environment and Infrastructure**

We are writing in response to the Climate Change, Environment and Infrastructure Committee's call for evidence on priorities for the term of the sixth Senedd. Blue Gem Wind welcomes the opportunity to outline its view on the strategic priority for the Committee in order to promote economic development, regeneration and skills in Wales and the role that the deployment of floating offshore wind can play in supporting a strong, green recovery from Covid-19.

### **Blue Gem Wind**

Blue Gem Wind is a joint venture between Simply Blue Energy, a pioneering Celtic Sea energy developer, and TotalEnergies, one of the world's largest energy companies. Blue Gem Wind is currently developing two floating wind sites with a combined capacity of ~400MW in Welsh waters of the Celtic Sea. The first project, Erebus (96MW), is Wales' first floating offshore wind farm c.45 km off the Pembrokeshire coastline and will provide enough energy for 90,000 homes. The second, larger project, Valorous (300MW), is to be located c.50 km off the Pembrokeshire coastline and will provide enough energy for 280,000 homes. Combined, these projects represent international inward investment of over £2.5 billion.

Blue Gem Wind's development focus is on maximising opportunities for the supply chain. A stepping stone approach, whereby floating wind projects progress from initial test and demonstration scale projects to larger early-commercial developments, will help to capture the

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highest local supply chain content for the projects that follow. This approach was adopted in response to a report by the Offshore Renewable Energy Catapult (OREC) for the Crown Estate

Scotland in 2018<sup>1</sup>, that identified stepping stone projects as the best way to enable local supply chain growth in this new sector.

## **Floating Wind**

For us, floating offshore wind combines two technologies that have been proven throughout the world, oil and gas platform technology and wind turbines. This means we can move into deeper waters with higher wind speeds and less visual impact. With 80% of the world's wind resource in water deeper than 60 meters (the current maximum for fixed offshore wind) floating wind is set to become a key technology in reaching Net-Zero and delivering the 100GW of offshore wind recommended in the recent Climate Change Committee's Sixth Carbon Budget.

Independent studies have suggested there could be as much as 50GW of electricity capacity available in the Celtic Sea waters of the UK and Ireland which is a significant low carbon resource at a UK level. This will allow Wales to maximise the estimated job creation of 17,000 UK jobs generating £33.6 billion for the UK economy by 2050.<sup>2</sup>

Floating Wind is predicted to reach subsidy free levels by the early 2030's.<sup>3</sup>

## **Economic Benefits and a COVID Green Recovery**

There is a tangible opportunity for the Welsh Government, Local Governments, LEPs and the UK Government to work together to deliver and implement the policy and infrastructure changes needed to deliver a long-term pipeline of sustainable, home-grown projects in Welsh waters of the Celtic Sea. This will create an industry that could also export to Ireland and further afield as the sector develops internationally. A report by the Offshore Renewable Energy Catapult (OREC) focusing on supply chain opportunities, produced for the Welsh Government and the Cornwall and Isles of Scilly Local Enterprise Partnership, identified that floating offshore wind projects in the Celtic Sea could support 3,200 jobs in South West England and Wales and bring £682m in benefits to the local supply chain by 2030 for the first GW of deployment<sup>4</sup>.

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<sup>1</sup> [https://ore.catapult.org.uk/wp-content/uploads/2018/10/PN000244-FWMS-Report\\_FINAL-1.pdf](https://ore.catapult.org.uk/wp-content/uploads/2018/10/PN000244-FWMS-Report_FINAL-1.pdf)

<sup>2</sup> [https://ore.catapult.org.uk/wp-content/uploads/2018/10/PN000244-FWMS-Report\\_FINAL-1.pdf](https://ore.catapult.org.uk/wp-content/uploads/2018/10/PN000244-FWMS-Report_FINAL-1.pdf)

<sup>3</sup> <https://ore.catapult.org.uk/press-releases/uk-floating-offshore-wind-subsidy-free-2030/>

<sup>4</sup> <https://www.marineenergywales.co.uk/wp-content/uploads/2020/01/Benefits-of-Floating-Offshore-Wind-to-Wales-and-the-South-West.pdf>

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OREC produced results from similar, project-scale, analysis in 2021 stating the Erebus project would support up to 1100 Full-Time Equivalent (FTE) job-years during construction and 73 long-term jobs annually during operation. Furthermore, Erebus would generate £182m in GVA from CAPEX and £9m annually from OPEX for the local and UK economy.

The Committee should look to examine how the economic development opportunities brought by floating offshore wind projects can be maximised with regards to Welsh supply chains and jobs.

### **Ministerial Priorities for the Next Twelve to Eighteen Months**

Blue Gem Wind welcomes the Ministerial commitments to renewable energy generation, in particular its developing marine energy programme, assuming Floating Wind is part of the marine energy programme.

### **Infrastructure Investment**

We agree with the Minister's assessment that 'infrastructure investment provides an important and much needed stimulus' and believe that this should be a high-priority in this term for the Welsh Government. In order to achieve this, it is critical that Ministers work with the UK Government to design the most appropriate investment scheme that facilitates supply chain growth and brings jobs.

- **Examine the economic development potential brought by floating offshore wind in the Celtic Sea and make recommendations to the Welsh Government on the actions required around port infrastructure investment that will facilitate supply chain growth.**

A key focus of the Committee should be to scrutinise the action by the Welsh Government in cooperation with the UK Government in the area of supply chain development and support. This should focus on port upgrades to ensure that the ports are fit for purpose for floating wind. It is understood that the £160m funding being invested by the UK Government port infrastructure for offshore wind is destined for the east coast of England but further port investment should be encouraged for the Celtic Sea ports through subsequent rounds.

There is the opportunity for a collaborative approach to a port strategy in Wales to support renewables and the Economy, Trade and Rural Affairs Committee should seek to work possibly in conjunction with the Climate Change, Environment, and Infrastructure Committee to understand the potential for co-investment in ports between Welsh and UK Governments.

This collaborative approach has proved successful for the recent Pembroke Dock Marine project as

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part of the Swansea Bay City Deal. The role ports will play in local supply chain benefits cannot be overstated and currently there are challenges for Welsh ports to support, in particular, the fabrication and integration of platforms and wind turbines due to the scale and development of floating wind.

Blue Gem Wind's projects could potentially add significant value and de-risk Government investment in Pembroke Dock Marine but to maximise the opportunity to Wales more port infrastructure investment is required and a careful examination of the barriers to this will be useful in maximising the economic development opportunities.

### **Stimulating Marine Energy Generation**

In order to ensure that floating offshore wind projects in the Celtic Sea are able to play their part in the Welsh Government's ambition for renewables to generate an amount equivalent to 70% of Wales' electricity use by 2030 and create jobs and investment opportunities alongside, Blue Gem Wind recommends that Ministers and your Committee:

- **Engage with The Crown Estate (TCE) to ensure that opportunities for 'early commercial stepping stone' floating offshore wind projects in the Celtic Sea are delivered through a timeous leasing framework for generation up to 300MW in output. Once this 'early-commercial' leasing framework is complete, a floating wind commercial scale leasing process should be progressed as soon as possible otherwise Wales will be disadvantaged vis a vis with Scotland who already have a commercial scale leasing round for floating wind and 2 floating wind projects fully commissioned.**

Seabed leasing and site security provided by The Crown Estate are vital to providing confidence to investors in floating offshore wind. The success of projects in the Celtic Sea is based upon a stepping-stone approach, whereby projects and the associated supply-chain are able to gradually scale-up, starting at ~100MW, moving to ~300MW, before taking on full-scale commercial projects. At present, The Crown Estate (TCE) provides a leasing mechanism for 100MW which Blue Gem Wind has used for its first site, Erebus (96MW). After this, there is currently no live process for floating wind projects to achieve a seabed lease in Welsh or English waters.

Encouragingly TCE launched a call for evidence in December 2020 for "early-commercial sites". This was followed by an announcement in March 2021 that The Crown Estate will be commencing work to create a new leasing framework for early commercial-scale floating offshore wind projects in the Celtic Sea up to 300MW in output. Ministers should be focused on highlighting the importance of timeous decision-making by TCE and value brought by effectively supporting the stepping-stone approach.

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- **Engage with the UK Government to ensure that the Contracts for Difference (CfD) scheme incentivises the use of local supply chain strategies and maximises the economic benefit to Wales.**

For floating offshore wind, revenue support will be required for at least the next ten years and we have supported the UK Government's decision to include floating wind in CfD Pot 2 along with other small scale or innovative technologies from Allocation Round 4 onwards. We believe that the Department for Business, Energy and Industrial Strategy has all the required capabilities being able to set pot capacities, create minima and maxima and use Administration Strike Prices (ASPs) to ensure the delivery of project at suitable value for money but it is important this is done in the context of a local supply chain strategy.

The two Blue Gem Wind projects will be, it is believed, each competing with similarly sized projects in Scotland. Wales and Scotland are keen to build up their supply chains for FLOW and it is important that the CfD competition in Allocation Round 6 (2025) is not set so that only one project and thus one region can be successful. The Welsh Government should be focused on maximising the economic value brought to Wales by FLOW through its supply chains and it is critical that Ministerial engagement around future revenue support system design takes place with this in mind.

### **Other areas for consideration**

Grid will require significant investment and strategic planning and could be a barrier to maximising the economic opportunities for Wales. Planning and NRW's role in providing timely consent decisions is also critical for Wales. Skills, training and diversification for a new floating wind sector is essential to capturing the economic benefits

We would welcome the opportunity to present in more detail the case for port infrastructure investment and supply chain contribution to economic development at any oral evidence sessions which result from this call for evidence. Should you have any questions, or wish to discuss the contents of this response, please contact [david.jones@bluegemwind.com](mailto:david.jones@bluegemwind.com)

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