

UK Marine Energy Council: Spring Budget representation January 2024

Introduction

The Marine Energy Council (MEC) welcomes the opportunity to submit a Spring Budget representation. The MEC is the voice of the UK's tidal stream energy (TSE) and wave energy industries. Established in 2018, the MEC's membership spans technology and project developers, key sites, manufacturers, and small and medium sized enterprises working in the supply chain. Our vision is for the marine energy sector to support a secure, cost-effective, and fair transition to net zero, enabling investment, exporting British innovation, and levelling up with employment opportunities across the UK.

The UK has a rich tidal stream and wave energy resource, that when harnessed could provide the equivalent of over 30% of the UK's current electricity demand.¹ This resource with a strong maritime and offshore engineering expertise, means the UK is strongly positioned to lead the world in harnessing the power of its waves and tides.

This combination is why research by the London School of Economics' Grantham Institute found that:

*"The UK is more specialised in tidal stream energy than in other clean technologies, including offshore wind, nuclear, and CCUS."*²

Through deploying just 12GW the UK Government can deliver £41bn in GVA to its economy,³ whilst saving £1bn in energy system costs per annum.⁴

Our members are proud that projects are currently in the water, harnessing entirely predictable renewable energy, with over 80% UK content. Our ambition is to embed local content in marine energy projects deployed in the UK and around the world.

This submission outlines 4 proposals to support the UK remaining at the forefront of marine energy deployment and support the Treasury's ambition to secure international investment and export opportunities.

¹ Coles et al (2021) *A review of the UK and British Channel Islands practical tidal stream energy resource*. Available [online](#), and Jin et al (2021) *Wave energy in the UK: Status review and future perspectives*. Available [online](#).

² London School of Economics (2023) *Seizing sustainable growth opportunities from tidal stream energy in the UK*. Available [online](#).

³ University of Edinburgh (2023) *What is the value of innovative offshore renewable energy deployment to the UK economy?* Available [online](#).

⁴ University of Edinburgh (2023) *Ocean Energy and Net Zero: Policy Support for the Cost Effective Delivery of 12GW Wave and Tidal Stream by 2050*. Available [online](#).

The Government's decision to set a tidal stream ringfence has positioned the UK as the world leader in the technology's development and deployment

The UK now has an unmatched deployment pipeline for tidal stream due to consecutive ringfences being set in the Contracts for Difference mechanism. This secured over 93MW of contracted capacity, and the UK is on course to have over 100MW deployed by 2028.

The setting of the ringfence has already had a tangible impact on investment in the UK. HydroWing, which secured a 10MW contract in Allocation Round 5 (AR5), has opened a new office in Wales and is seeking to manufacture its turbines in the UK.⁵

The timelines for Allocation Round 6, means the sector needs to wait until March this year to find out whether there will be another ringfence in the upcoming auction. This lack of certainty is a reoccurring problem, as industry does not know if there is going to be a ringfence in any future allocation rounds. This is damaging investor confidence.

- **Proposal 1: set a 1GW deployment target for tidal stream for 2035.**
- **Proposal 2: set a 300MW deployment target for wave energy for 2035.**

Setting clear deployment targets will provide the marine energy sectors confidence that the UK Government is invested in realising its marine energy potential, whilst being consistent with the rules of the Contracts for Difference mechanism. These targets should be combined with a commitment to the Government working with industry to address barriers to realising these ambitions. This includes working with the devolved administrations to accelerate the consenting process, including marine energy in considerations around expediting the grid connection process.

A ringfence has not been set for wave energy despite significant technological progress being made by companies such as CorPower, which successfully piloted its wave energy device in Portugal, and the announcement of the Saoirse Wave project, a joint venture between Simply Blue Group and ESB which will deploy a 5MW wave array in Ireland. Simply Blue is also seeking a 5MW marine licence for a similar array in Orkney waters, utilising the European Marine Energy Centres (EMEC) wave berths. This pilot project is only possible if strategic revenue and funding support is provided. There is a significant increase of investments from major companies such as TotalEnergies, Aker Solutions, MOL+ in both CorPower and Mocean Energy offshore tests with the purpose to de-risk large scale wave energy projects.

Signalling that the UK Government will work with the sector to realise the UK's wave energy potential by setting a target, will help the UK keeps pace in terms of an attractive location for investment against countries that are moving forward.

- **Proposal 3: incentivise investment into marine energy projects and supply chains.**

Despite the UK's rich resource, and leadership within tidal stream, marine energy is often not included in fiscal announcements. For example, the £960m Green Industries Growth Accelerator (GIGA), that will speed up connections and increase capacity to boost energy security, and green UK supply chains, does not mention marine energy. There are significant synergies in investing in critical port infrastructure in a manner that can accommodate marine energy deployment, however too often marine energy is not included in the discussion.

Improving confidence in the marine energy sector can be achieved by ensuring that the Spring Budget notes the rich economic, export and energy potential of marine energy, and highlights this alongside measures to support the growth of green industries in the UK. The LSE has warned that the UK is in a race against countries like Canada, China, France, and the US to seize the marine energy opportunity. The UK Government should seek to embed UK content in marine energy projects delivered around the

⁵ Offshore Energy (2024) *Inyanga Marine opens office in Wales to support HydroWing tidal energy project*. Available [online](#).

world. This can be achieved through incentivising investment in projects and supply chains, for example through capital allowances and capital support for manufacturing facilities.

The Government has demonstrated commendable leadership in introducing and maintaining a ringfence. Signalling to investors that marine energy is going to have a clear role in the UK's future energy mix and maintaining its presence in other interventions will bolster investor confidence.

- **Proposal 4: include marine energy in 'technology push' interventions.**

Technology push interventions or support for innovation, and research and development in renewable technologies is critical in lowering the Levelised Cost of Energy (LCOE) for a technology, and in making the UK an attractive investment location.

The MEC strongly supports the UK and EU working together within the Horizon programme. In 2023 it was announced that two tidal stream projects were successful in their bid for funding from the Horizon Programme, with the Nova Innovation-led SEASTAR project, and Orbital Marine Power-led EURO-TIDES securing a combined €40M of funding.⁶ However, the UK can not depend solely on support from EU-led programmes and should ensure marine energy is supported through future interventions like the Net Zero Innovation Portfolio.

Between 2017-22 tidal stream only received £17m of innovation funding and wave energy £47m from the UK Government and devolved administrations. Should the required levels of technology funding for accelerated and sustained innovation be provided, UK developers have the potential to increase cost reduction rates and maintain the UK's leadership in this international sector. Targeted innovation funding has also been proven to greatly reduce the overall cost associated with providing the market pull mechanisms required to support emerging renewable energy technologies.

Research by the University of Edinburgh has shown that by increasing the learning rate within marine energy from 10 to 15% would reduce the cost of reaching 12GW of marine energy deployment for tidal stream from **£18.6bn** to **£3.3bn** and **£20.5bn** to **£3bn** for wave energy for UK households.⁷

⁶ Marine Energy Council (2023) *Clean Sweep for UK Projects in Horizon tidal call*. Available [online](#).

⁷ University of Edinburgh (2023) *Ocean Energy and Net Zero: Policy Support for the Cost-Effective Delivery of 12GW wave and Tidal Stream by 2050* Available [online](#).