



**Department for
Business, Energy
& Industrial Strategy**

Rt Hon Kwasi Kwarteng MP
Secretary of State
Department for Business,
Energy & Industrial
1 Victoria Street
London
SW1H 0ET

T +44 (0) 20 7215 5000
E enquiries@beis.gov.uk
W www.gov.uk

The Rt Hon Philip Dunne MP, Chair
Environmental Audit Committee
House of Commons
London
SW1A 0AA

Our ref:
Your ref:

19 April 2021

Dear Philip,

Thank you for your letter of 30 March 2021 regarding the Committee's inquiry into the potential of tidal power to contribute to the UK's renewable energy mix.

The Government recently ran a Call for Evidence inviting views on the scope for marine technologies across the UK, including tidal, which concluded on 30 September 2020.

I welcome the Committee's inquiry as a further source of evidence on the potential of tidal energy projects in the UK and types of additional support that can help move tidal range and tidal stream towards commercialisation.

Whilst marine technologies are still at a relatively early stage of development, the present Government takes the view that they could have a role play in the UK's long-term decarbonisation, ensuring that we meet our 2050 net zero emissions target. As you note, government recognises the need for a diverse energy generating mix, complementing offshore wind with other renewable generation sources. Following the recent Marine Energy Call for Evidence, we have set an ambition of deploying 1GW of floating offshore wind by 2030, supported by CfDs and innovation funding.

The Government considers that several issues identified in the Committee's letter, which in the main relate to the provision of special funding measures to support tidal technologies, need further review and also notes the Committee's recommendations in relation to these issues.

I would like to thank the Committee again for this useful inquiry into potential of tidal power in the UK. We are currently analysing the commercial and technical evidence received from the Call for Evidence and expect to publish a full response in due course.

Thank you again for taking the time to write.

Yours ever,

A handwritten signature in black ink, appearing to read 'Kwasi Kwarteng', written in a cursive style.

RT HON KWASI KWARTENG MP

Secretary of State for Business, Energy & Industrial Strategy

BACKGROUND

1. The Environmental Audit Committee published a letter on tidal power in the UK on 31st March 2021. The Committee focussed its inquiry on, amongst other things, what contribution forms of tidal power play towards the UK's energy mix and how financial support can be structured to assist technological and project development in this area. This paper sets out the UK Government's response to the conclusions and recommendations of that letter.

INTRODUCTION

2. The Government welcomes the Environmental Audit Committee's letter on tidal power and the recommendations made within.
3. The Committee's inquiry focussed on the role of tidal energy in the UK's low-carbon energy mix and whether tidal power could play a role in the UK's commitment to be net-zero by 2050. Whilst marine technologies are still at a relatively early stage of development, the present Government takes the view that they could play a significant role in the UK's long-term decarbonisation, ensuring that we meet our 2050 net emissions target. As you note, this government recognises the need for a diverse energy generating mix, including complementing offshore wind with other renewable generation sources. Following the recent Marine Energy Call for Evidence, we have set ambition of deploying 1GW of floating offshore wind by 2030, supported by CfDs and innovation funding.
4. The Government considers the several issues identified in the Committee's letter, which in the main, relate to the provision of special funding measures to support the tidal technologies, need further review and also notes the Committee's recommendations in relation to these issues. It is important to note that any special provision for the tidal technologies and indeed any other emerging technologies within the Contracts for Difference (CfD) mechanism must be rooted in its fundamental principles as set out in the Energy Act 2013, which are Value for Money, Fairness and Energy Decarbonisation and Security. Value for Money is a particularly important factor as we must recognise the scope for CfD support to impact on consumers' electricity bills.

Current position

5. We have seen the substantial progress of made by offshore wind in successive CFD allocation rounds where it has previously competed in Pot 2 with other less established technologies. Clearing prices for this technology have reduced by around 30% since AR2 and around 65% since AR1.
6. As a result of the success of the offshore wind in successive auctions, its levelised costs have fallen well below many of the Pot 2 technologies, making

it difficult for these technologies, including tidal stream to compete. As a result, we have carved out the offshore wind competition into a separate pot, thus allowing marine tidal projects and remote island wind projects to remain in pot 2 where they can compete with each other much more effectively. However, the costs of tidal stream remain expensive relative to the costs of other less established renewables in Pot 2, notably Remote Island Wind and Floating Offshore Wind.

7. We recognise the deployment potential of tidal stream in the UK, particularly in the South West and North Wales and off the coasts of Scotland as well as the important benefits it can bring to bear on the electricity system. However, any decision to intervene via ringfenced support for tidal stream in subsequent CfD allocation rounds must be based on a clear Value for Money case.
8. In our written submission to the EAC evidence session, we cited the 2018 report of the Offshore Renewable Energy (ORE) Catapult which asserts that that cost reduction to below £90/MWh can be secured, supported by deployment across the 2020s and 2030s. BEIS analysts are currently undertaking modelling to verify ORE's figures and to determine whether there is a strategic case for the government to establish special funding measures to support the development of tidal stream, as well as analysing the other commercial and technical evidence received from the CfE. We are also undertaking a similar assessment for tidal range technologies.

Recommendation 1: We therefore recommend that you engage constructively with the tidal stream sector to discuss an administrative strike price for CfD AR4 which will realistically allow the projects in development to proceed to the grid offer which will unlock full deployment. This appears to us to be the prerequisite to attracting large-scale investment, the upscaling of developments and thus the rapid reduction in generation costs foreseen by our witnesses.

9. We will publish specific allocation round parameters in advance of the next CfD auction, as is usually the case, near the time of the auction. This will include the details of whether any technology-specific minima will apply. Wave and tidal stream projects remain eligible to compete in pot 2 for CfD auctions.
10. The Secretary of State, Kwasi Kwarteng and Minister Trevelyan have met with the MEC at a meeting organised by the APPG on marine energy and tidal lagoons twice in the recent few months. Given tidal stream technology is at an early stage of development, BEIS officials continue to engage with tidal stream developers to explore where cost reductions can be achieved. We are currently analysing the commercial and technical evidence received from the Call for Evidence and expect to publish a full response in due course.

11. Wave and tidal stream projects remain eligible to compete in pot 2 for CfD auctions.

Recommendation 2: We recommend that your Department, together with the Treasury, give consideration to the innovation power purchasing agreement model proposed by the sector, which provides an alternative means for developers and investors to be paid for energy generated.

12. We are aware that the Marine Energy Council is looking at alternative funding models for early tidal array deployment outside the Control for Low Carbon Levies ("The Control"). Government is interested, in principle, in determining whether there could be more effective funding models to support emerging technologies while they bring their costs down to a point where they can compete in the market with other forms of low-carbon generation. However, because the IPPA is primarily a tax-based instrument any decisions on its adoption would reside with Treasury. We are not currently pursuing tax-funded measures to support the development of nascent technologies.
13. There is currently no intention to provide specific grant/innovation funding for wave or tidal stream technologies. However, as part of the Government's Industrial Strategy and general innovation funding, there are a number of initiatives, focused on innovation in clean energy, and on supporting the development of technologies, products and processes in energy efficiency, power generation and storage which wave and tidal projects may be able to bid in for.
14. The Government has a long history of supporting the development and deployment of wave and tidal stream technologies in the UK. To date we have provided sustained and targeted support enabling the wave and tidal stream sectors to move from initial concept onto prototypes and now the first arrays. Since 2003 various bodies across Government have provided innovation funding of £175m to the wave and tidal sectors.

Recommendation 3: We recommend that the Department support the industry in the diversification of the UK renewable energy mix, the creation of employment opportunities and the development of tidal range technology by establishing a dedicated fund to support the studies required.

15. The Government remains open to considering well-developed proposals for harnessing the tidal range energy in the bays and estuaries around our coastlines, including barrage and other alternatives. we can't commit to funding at this stage but could commit to considering it in the context of green transition and the role of tidal stream more broadly.
16. Any tidal range scheme would need to demonstrate strong evidence of value for money (in the context of other renewable technologies), economic

benefits, energy saving and environmental impact mitigation before the Government could take a view on its potential.

17. Government may, in the medium term, consider the establishment of a dedicated fund to support assessment of tidal range schemes, however, consideration of such a fund shall be done within the broader context of the green transition.