

### THE POTENTIAL OF MARINE ENERGY THE NEXT DECADE

ORE Supergen Annual Assembly 18<sup>th</sup> January 2022

### Marine Energy – Wave and Tidal Technologies

- Over 40GWh of marine energy generation in the UK to date
- 293GW global market for ocean energy by 2050
- European target 100MW by 2050
- UK alone holds 35% of European wave resource and 50% of tidal.
- Domestic ORE deployments result in high GVA per MW (£258k/MW to £746k/MW.)
- Predictability and unique benefits.
- UK Future deployment scenarios 6GW wave, 6GW tidal stream by 2050.







### Marine Energy Council

Set up April 2018 to meet challenge of political position on marine renewables.

Progression from the ORE Cost Reduction Strategy Advisory Group.

50+ organisations - developers, academia, test centres, industry associations.

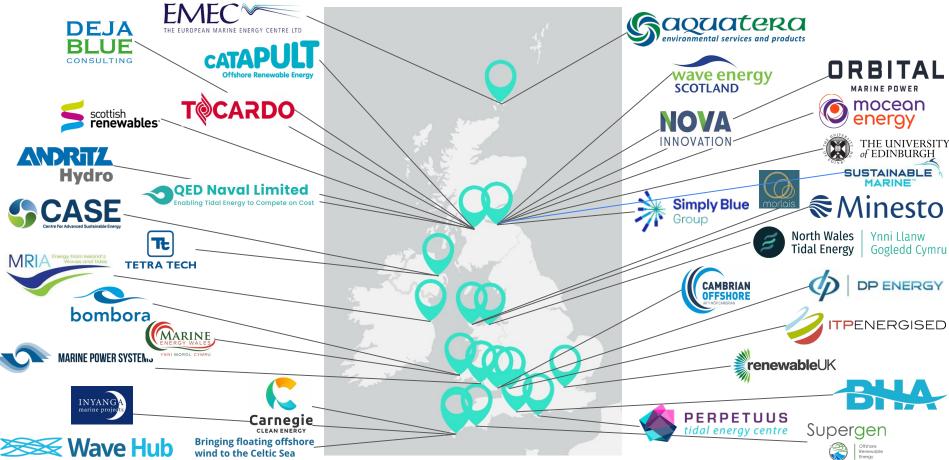
Introduction of concept of an IPPA and reinvigoration of the CfD for revenue support.

Focus on seeking industry consensus, collaboration and political engagement.

Opportunity to influence energy policy for innovation in 2022 and onwards

## **MEC Membership**





### UK Marine Energy – Political Position

- Significant Government and public investment to date (EMEC £34m, WaveHub, Pembroke Dock Marine, R&D funding), leasing rounds and demonstration zones.
- $^\circ$  Removal of the marine energy 'ring fence' in the 2019-2021 CfD allocation rounds.
- 2017 saw the Clean Growth Strategy & Industrial Strategy set out the policy positions.
- Marine sector need to provide evidence on performance, cost reduction and collaborate.
- 2018 ORE Cost Reduction report, MEC established, notable downturn in marine activity in UK.
- 2019-2021 significant consultations with the UK Government.
- CfD AR4 £20m ring fence for tidal energy, closed 14<sup>th</sup> January.



# Wave and Tidal Resources in the UK





#### **Capturing the Opportunities from our Natural Resources**

The UK is the world leader in wave and tidal stream technologies and with the correct signals from the UK Government can capture the vast opportunities to 'level-up' coastal communities and the industrial heartlands in England, Scotland and Wales.

#### **Tidal Stream**

- New cumulative GVA benefit to the UK by 2030 of £1.4bn
- Support a total of 4000 high quality jobs by 2030 and 14,500 by 2040
- Deliver net £25bn GVA by 2050

#### Wave Energy

- Net cumulative GVA benefit to the UK by 2040 of £4bn
- 8,100 more high quality jobs by 2040

Figures taken from the Offshore Renewable Energy Catapult (2018): Tidal Stream and Wave Energy Cost Reduction and Industrial Benefit Report.

## **Identify Policy 'Asks'**



Unlocking the Wave and Tidal Stream Market in the UK

- 1GW shared target for Marine Energy
- Route to Market through Contracts for Difference (CfD) Allocation Round 4 and onwards





Offshore Renewable Energy



## Marine Energy – Delivering a Sector

Support for changes to the CfD into next administrative rounds

Support the proposal of an IPPA

Seek Government level approval and support for marine energy – a shared vision

Continuation of capital grant funding at low TRL levels

Recognising advantages to the marine energy supply chain of *multiple technology delivery* 

Support marine energy in delivery of Net Zero and economic recovery.



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