

## Press Release

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### Wave energy company completes scale tank testing

Marine Power Systems (MPS), a Swansea-based company developing revolutionary technology designed to capture the energy from ocean waves, has recently conducted scaled tank testing of the company's innovative WaveSub device. The tank scale power-take-off systems have been developed in collaboration with experts from the University of Bath. In addition to validating MPS' computational simulations, the test programme has been supported by two Plymouth University post-graduate students as part of their MSc projects.

The rigorous tank testing took place at Plymouth University's Coastal, Ocean and Sediment Transport (COAST) laboratory, a specialist facility providing physical model testing with combined waves, currents and wind, offered at scales appropriate for device testing, array testing, environmental modelling and coastal engineering.

MPS' WaveSub project has been part-funded by the European Regional Development Fund through the Welsh Government, with MPS receiving a £2 million grant in October 2015.

The WaveSub will provide a reliable renewable energy source through harnessing the energy from ocean waves. The technology being developed at MPS has huge potential to contribute to energy security targets and will reduce reliance on unpredictable and non-renewable energy supplies. MPS' wave energy converter (WEC) is due for deployment at sea later this year.

Dr Gareth Stockman, co-founder and managing director of Marine Power Systems, said:

"We are pleased to be continuing our relationship with Plymouth University's COAST lab, which provides the opportunity to conduct a significant number of simulated operational and extreme sea state tests in a sophisticated purpose built tank with specialist support. MPS has been collaborating with Plymouth University for a number of years, utilising the facility to optimise the WaveSub prior to sea-testing, whilst supporting many MSc projects, to nurture the future talent for the marine renewables sector.

"MPS is also pleased to be working with the University of Bath, through the Centre for Power Transmission and Motion Control (PTMC) on our power-take-off system, which has a world-leading reputation as a centre of excellence in such systems."

Dr Andy Hillis, senior lecturer in mechanical engineering at Bath University, said:

"It is a great pleasure to work with Marine Power Systems and the innovative WaveSub device provides a fascinating engineering project for scaled power-off-system design. Wave

energy has the potential to provide a significant contribution to the UK energy mix and MPS are at the forefront with a novel solution. We are delighted to be involved and we hope to maintain a longstanding and fruitful collaboration.”

Professor Deborah Greaves, professor of ocean engineering and director of the COAST Laboratory, said:

“We are very pleased to be collaborating with MPS through MSc student projects and scale model testing in the COAST Laboratory at Plymouth University and we are delighted to see how well the development of the WaveSub device is progressing.”

**Marine Power Systems**

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**Notes**

For more information on Marine Power Systems, please visit: [www.marinepowersystems.co.uk](http://www.marinepowersystems.co.uk)

For more information about the COAST laboratory, please visit:  
[www.plymouth.ac.uk/research/institutes/marine-institute/coast-laboratory](http://www.plymouth.ac.uk/research/institutes/marine-institute/coast-laboratory)