

Mocean Energy is back on shore after successful trials

The wave energy machine being developed by Mocean Energy, Blue X, is back in dock in Orkney following a successful five month sea trial.

The Edinburgh-based company has towed its 20-metre long, 38-tonne machine away from the European Marine Energy Centre's Scapa Flow test site back to Kirkwall, where it has been lifted onto Hatston Pier and will now be cleaned and examined.

This brings to a close the test phase which began in mid-June and the machine has been at sea for 154 days delivering 5kW with peaks of 30kW and operating in sea states up to 2.3metres.

The firm plans a further trial phase in Orkney next year when the machine will be connected to a subsea battery to power a remotely operated autonomous underwater vehicle. This will have application for oil and gas operators, and the project is a collaboration with EC-OG and Modus.



Mocean Energy's Managing Director Cameron McNatt with Mocean Energy's Blue X wave energy converter at Forth Ports' Rosyth Docks.

Mocean Energy Managing Director Cameron McNatt said: "This has been an immensely valuable period where we have been able to understand how our machine operates in real sea conditions and gain practical experience in operations including towing, installation, removal, and access at sea.

“We’ve been able to unmoor, tow and moor the machine multiple times, trial the use of solar panels on deck, send commands from shore, test power production and compare our results against our numerical predictions.

“This has given us tremendous confidence in our design – both in its ability to capture wave energy effectively, and also the way in which it dives below the biggest waves, enabling it to shed the heaviest loads.

“Of course, we have been able to rely on the expertise of a number of partners and subcontractors and would like to thank Wave Energy Scotland, EMEC, Blackfish, Leask Marine, the University of Edinburgh and Supply Design, plus many other individuals and companies who have helped us on our way.”







Tim Hurst, Managing Director of Wave Energy Scotland said: “It is only through testing technologies at sea that we can demonstrate the real potential for wave energy to make a significant contribution to the world’s ever-growing green energy demands.

“The success of Mocean Energy underscores the merits of Wave Energy Scotland’s stage gate selection process which has fostered a collaborative cross-industry approach from day one.

“In the years ahead, we will see Mocean Energy scale up its wave energy convertors to produce future technologies with potential to help decarbonise the oil and gas sector and deliver grid-scale electricity.

“At this moment, the UK Government is actively considering implementing a ring-fenced market support mechanism for marine energy, which could enable Britain’s wave and tidal sector to take a global lead.

“Post-COP, it is vital Britain puts a ring-fence in place and

uses every lever it can to support home-grown technologies which can create a net zero future.”

The company has been supported by £3.3 million from Wave Energy Scotland.

