

## **ASX Announcement**

**Tuesday, 23<sup>rd</sup> September 2014**

### **WavePOD prototype ready for European testing**

- **Innovative wave power take off prototype delivered to Aachen University in Germany**
- **Six month laboratory test program to begin at world-leading Institute for Fluid Power Drives and Controls**
- **Lab tests to be followed by in-ocean test programmes**

**Wave energy developer Carnegie Wave Energy Limited (ASX: CWE) is pleased to announce that its collaborative project to develop a standardised, self-contained offshore electricity generator for the wave industry moved a step closer last week when a tenth-scale WavePOD prototype moved to the world-leading Institute for Fluid Power Drives and Controls (IFAS) at Aachen University, Germany.**

The WavePOD wave power offtake device is being developed by global drive and control manufacturer Bosch Rexroth as part of a collaboration including some of Europe's leading wave energy developers, utilities and academic institutions including Carnegie's 100% UK subsidiary, CETO Wave Energy UK (CWE UK). The project's goal is to develop an industry-wide power take off that will generate electricity reliably and cost effectively at sea.

The laboratory testing at Aachen University's world-class facility is designed to provide performance data on the WavePOD unit to allow Bosch Rexroth to develop and refine the prototype prior to in-ocean testing. In-ocean testing is initially planned for fellow wave developer, Aquamarine Power's Oyster 800 device in Scotland and subsequently targeted for Carnegie Wave Power's CETO technology at WaveHub in Cornwall.



**The WavePOD prototype delivered to Aachen University**

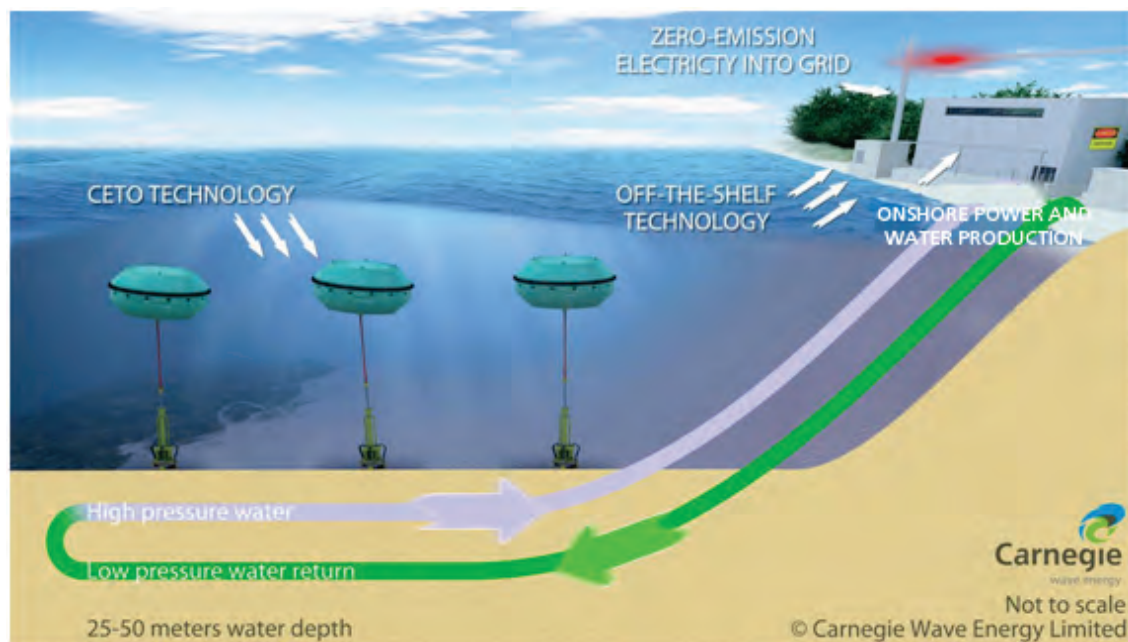
The tenth scale prototype, which weighs ten tonnes and comprises a drive train, cylinder frame and power take off, has been manufactured in Middlesbrough and at Bosch Rexroth's hydraulics centre at St Neots, Cambridgeshire, prior to being shipped to IFAS.

The WavePOD prototype development and testing programme receives funding support from the Scottish Government's Marine Renewables Commercialisation Fund (MRCF). The collaboration brings together with European industrial Bosch Rexroth and Irish utility ESB, along with Aquamarine Power, Carnegie's UK subsidiary, CWE UK, Albatron and Manchester University spin-off M4M. ESB is also developing the European-funded Westwave wave project off the west coast of Ireland.

### **About Carnegie**

[Carnegie Wave Energy Limited](#) is an Australian, ASX-listed (ASX:CWE) wave energy technology developer. Carnegie is the 100% owner and developer of the CETO Wave Energy Technology intellectual property.

### **About CETO**



**CETO Power & Water**

The CETO system is different from other wave energy devices as it operates under water where it is safer from large storms and invisible from the shore. Power can be generated either offshore or onshore. The fully submerged buoys can drive seabed pump units deliver high pressure fluid onshore via a subsea pipe to standard hydroelectric turbines, generating zero-emission electricity. The high-pressure water can also be used to supply a reverse osmosis desalination plant, replacing or reducing reliance on greenhouse gas-emitting, electrically-driven pumps usually required for such plants. Alternatively, the movement of the buoys can drive pumps and generators offshore that are contained within the buoy itself with power delivered back to shore through subsea cables.

CETO technology characteristics include:

- Converts ocean wave energy into zero-emission electricity and desalinated water.
- Environmentally friendly, has minimal visual impact and attracts marine life.
- Fully-submerged in deep water, away from breaking waves and beachgoers, and unaffected by storms.

#### **CETO 6 Project Fact File**

- The Project comprises the design, construction, deployment and demonstration of three CETO 6 units in a grid-connected, up to 3MW peak installed capacity wave energy project at Garden Island, Western Australia.
- The CETO 6 Project is supported by \$11m in Australian Government funding through the Australian Renewable Energy Agency's Emerging Renewables Program.
- The CETO 6 Project is supported by a five year \$20 million loan facility from the Australian Clean Energy Finance Corporation.
- Utilises Carnegie's fully submerged and commercially proven CETO wave energy device.
- The clean, renewable energy generated by the Project will be sold to the Australian Department of Defence at Australia's largest naval base, HMAS Stirling, on Garden Island in Western Australia.

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