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## NEWS FROM **SUSTAINABLE MARINE ENERGY** WITH PICTURES

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### COMMERCIALY VIABLE TIDAL ENERGY A MAJOR STEP CLOSER

#### **Successful sea trials of Sustainable Marine Energy's tidal energy platform, PLAT-O, demonstrates a fresh approach for delivering cost-effective tidal energy**

Sustainable Marine Energy (SME) has successfully completed its first round of sea trials with its tidal energy platform, PLAT-O. The tidal energy industry has struggled with high costs for installation and maintenance but SME is demonstrating that by using its innovative platform which is moored under the surface of the water, these costs can be significantly reduced.

PLAT-O was launched from the company's facility in Venture Quays, East Cowes, Isle of Wight and towed to the test site at Yarmouth. Once at the site PLAT-O was submerged to installation depth and a series of tests were run. PLAT-O was successfully resurfaced and towed back to East Cowes, where it will be prepared for its next series of trials.

The marine operations were run using small vessels, demonstrating that a step change reduction in the cost of installing tidal energy devices can be achieved. The results of the sea trial provide increasing confidence in the potential for tidal streams to provide a commercially viable source of renewable energy.

#### **A vision**

Jason Hayman, Managing Director of SME, says, "We have reached a huge milestone in the development of our solution to address the costs associated with delivering tidal energy. Over a short period of time we have achieved a great deal thanks to our capable and passionate team. After this weekend's operations I am confident that PLAT-O provides the industry with a new approach which reduces the costs and risks associated with delivering tidal energy considerably. Over the next few months we will be ramping up the time that PLAT-O spends at site, and running a series of tests which will culminate in the installation of PLAT-O at a more aggressive tidal site and generating power to the grid."

#### **Marine operations**

David Thomson, Managing Director of Orcades Marine Management Consultants, who manages the delivery marine operations for SME, adds, "The progress that the team at SME have made culminating with the recent trial installation of PLAT-O should be regarded as a terrific achievement. I have been involved in many tidal installation operations and I have seen first-hand the challenges facing the tidal industry in relation to the cost of operations. It is clear to me that PLAT-O has the opportunity to succeed and provides a viable solution for the tidal energy industry." /more...

#### **Sustainable Marine Energy Ltd**

Trinity Road, Trinity Wharf, East Cowes, Isle of Wight, PO32 6RF, United Kingdom

Tel: +44 1983 297 145

[www.sustainablemarine.com](http://www.sustainablemarine.com)

Registered in England. Company number 8139012. Registered office: 50 Fishers Lane, Orwell, Royston, Hertfordshire, SG8 5QX

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## Notes to Editors

### **ABOUT SUSTAINABLE MARINE ENERGY**

Founded in 2012, Sustainable Marine Energy (SME) is bringing an innovative tidal platform, PLAT-O, to market that will dramatically reduce the costs and risks of deploying and operating tidal energy systems. By doing this, the commercial competitiveness of tidal energy relative to other electricity generation technologies will be radically enhanced. SME is in the process of delivering its first demonstration project, working with the leading marine propulsion supplier and tidal turbine manufacturer, SCHOTTEL.

SME's team of fifteen is based in East Cowes on the Isle of Wight, an area well known for delivering innovation across the maritime sector. SME has been supported by investment from private investors, the Low Carbon Innovation Fund, the Angel Co Fund, and grant funding from the Department of Energy and Climate Change, Innovate UK, the Low Carbon KEEP Programme, the Solent Offshore Renewable Energy Consortium and Future Solent's Green Growth Fund.

### **ABOUT PLAT-O**

PLAT-O provides a step-change reduction in the cost of delivering tidal energy; one of the Earth's most abundant and reliable renewable energy sources. PLAT-O is a buoyant platform that is taut moored to the seabed using a bespoke anchoring solution that has also been developed by SME. It sits under the surface of the water and offers a number of other benefits including enhanced yield and survivability due to its position in the water column, which also ensures that surface vessels can pass safely overhead. Besides a surface marker buoy, the system is not visible on the surface.

PLAT-O is compatible with most leading tidal turbine technologies and it can be adapted to suit a wide range of configurations. SME has the flexibility to scale up the platform and work with manufacturers of tidal generators to utilise new technologies as they emerge. The current PLAT-O prototype hosts two SCHOTTEL STG50 tidal generators and SME is working with SCHOTTEL to deliver a system capable of providing commercially viable tidal energy to island and coastal communities. PLAT-O provides a systems integration platform which hosts power conditioning and control systems that enables the export of power from multiple generators through a single export cable.

PLAT-O was designed from the outset with simplicity and flexibility in mind. All installation and maintenance operations for PLAT-O can be carried out with small, readily available vessels, avoiding the need to hire large heavy-lift ships. This also reduces the risks associated with weather downtime for project developers.

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**SUPPLIERS, PARTNERS AND STAKEHOLDERS**

The development of PLAT-O and the delivery of the first round of sea trials has required support from a large number of businesses and stakeholders from across the UK and further afield, with a particular emphasis on the Solent region.

**PLAT-O build and logistics:** BSA Regal Group, PE Composites, South East Hydraulics, Kingswell Haulage, Air Power & Hydraulics.

**Power take-off and control:** SCHOTTEL, ASV, Goodwolfe Energy.

**Design and verification:** DNV GL, Ultramag Inspection Services, Future Energy Engineering, Offshore Renewable Energy Group - Cranfield University, IFREMER, Dynamic Systems Analysis, QinetiQ Marine Design Software, Adris, Autodesk.

**Anchoring and mooring system:** Spencer Rigging, English Braids, Harken UK, EYE Marine, PFEIFER Rope & Tackle, Autoguide Equipment, Rockbit UK, Technical Services Team, Marine South East.

**Marine Operations:** Orcades Marine Management Consultants, Williams Shipping, Kingston Marine Services (Cowes Harbour Commission), Andark Diving, Seastar Survey.

**Key stakeholders:** Yarmouth Harbour, Royal Yachting Association, Marine Management Organisation, Maritime & Coastguard Agency, Natural England, Isle of Wight Council, Royal Solent Yacht Club.

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For more media information, high-res photographs or to arrange interviews please contact:  
Clemency Ives, Communications, Sustainable Marine Energy  
clemency.ives@sustainablemarine.com  
01983 297145/ 07717 098836