



**Stonehenge**  
METALS LTD



ASX Code: SHE

31 March 2015  
Market Announcements Platform  
ASX Limited,  
Exchange Centre,  
20 Bridge Street,  
Sydney NSW 2000



## PROTEAN DETAILED DESIGN COMPLETED

- Detailed design work completed well ahead of schedule and within budget
- Fabrication is on track to commence during April

Stonehenge Metals Limited (**Stonehenge, SHE** or the **Company**) is pleased to announce that the detailed design of the Protean Wave Energy Converter (**WEC**) has been completed.

In accordance with the terms of the fixed price turn-key project agreement between the Company and Moore Commerce Pty Ltd<sup>1</sup>, the Company has been given formal notification that the detailed design of the 1.5kW peak output Protean device has been completed. The detailed design was completed well within schedule and within budget; opening the way for preparation for the fabrication of the first 1.5kW device ahead of schedule.

The completion of this pre-manufacturing phase is an important milestone in the efforts of the Company to build a commercial solution from the Protean technology platform. The Company aims to create an economically viable wave energy converter to satisfy the global demand for cost effective renewable energy.

To support its ambition to rapidly commercialise the Protean WEC technology, the Company will continue its efforts to build local, national and international collaborations from both existing and new supporters of the Protean solution. The opportunity to move to early commercialisation is built upon the goodwill that Sean Moore has built over the preceding years, during which the Protean technology has been tested and refined.

For further information see [www.stonehengemetals.com.au](http://www.stonehengemetals.com.au), [www.proteanwaveenergy.com.au](http://www.proteanwaveenergy.com.au) or contact:

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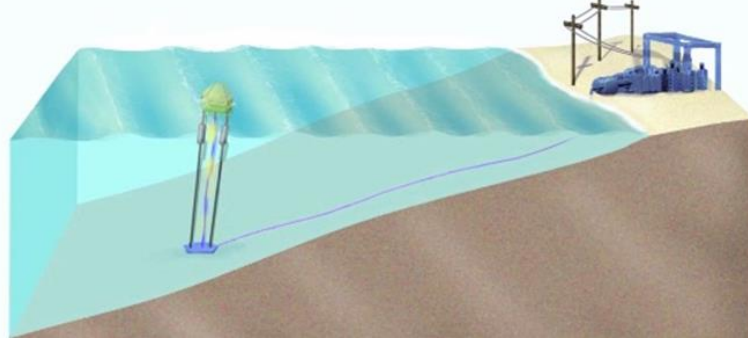
<sup>1</sup> Moore Commerce is the technology development company directed by Sean Moore and is engaged to deliver the fixed price turnkey project of 30 x 1.5kWp Protean technology devices.

## ABOUT THE PROTEAN WAVE ENERGY CONVERTER (WEC) TECHNOLOGY



Stonehenge has entered into an option agreement to purchase the Protean WEC technology. The Protean WEC system is based upon a point-absorber wave energy converter buoy device which floats at the water surface and extracts energy from the waves by the extension and retraction of a tether to its anchoring weight on the seabed. The device is unique in that it optimises the conversion of energy from waves at the surface through **all six degrees of wave movement**.

**Figure 1:**  
Protean WEC  
technology



The Protean WEC has been developed to use compact architecture to produce power from a small, low cost, scalable design targeted at keeping the projected levelised cost of energy (LCOE)<sup>2</sup> down. The Protean WEC has been designed to be cost competitive to manufacture, deploy, maintain and retrieve. The future plans for the Protean WEC include the deployment of a pre-commercial demonstration of a dynamic, configurable and scalable power array prior to moving the technology into early commercialisation. During the Option period the Stonehenge assessment program aims to:

1. **Refine** the tried and proven scale device to produce a suitable pre-commercial model;
2. **Create** a scalable power array so as to provide the power requirements of a prospective customer;
3. **Test** the scalable power array for its potential to deliver cost effective power,
4. **Verify** the results, including commissioning of an independent expert to qualify the testing results; and
5. **Commence** commercialisation of the scalable array for small to medium customers.

### Protean Wave Energy Converter (WEC) Design, Fabrication and Deployment

<b>PAST</b> Successfully Tested Prototype	<b>PRESENT AND FUTURE</b> Deploy Demonstration Wave Farm
	 <p style="text-align: center;"><a href="http://proteanwaveenergy.com.au/technical/">http://proteanwaveenergy.com.au/technical/</a></p>
<ul style="list-style-type: none"> <li>➤ 1.5m wide proof-of-concept device successfully tested.</li> <li>➤ Device operation validated in varied depths and sea states.</li> <li>➤ Design principles independently verified from test results.</li> <li>➤ Simple patented deployment system demonstrated.</li> </ul>	<ul style="list-style-type: none"> <li>➤ Identify and secure deployment sites and customers.</li> <li>➤ Deploy 1m wide "proof of commercial applicability" unit.</li> <li>➤ Demonstrate key design improvements.</li> <li>➤ Deploy an array (farm) of Protean WEC devices.</li> <li>➤ Confirm Protean as scalable power/water solution.</li> </ul>

For further information visit: [www.proteanwaveenergy.com.au](http://www.proteanwaveenergy.com.au) or [www.stonehengemetals.com.au](http://www.stonehengemetals.com.au)

<sup>2</sup> Levelised cost of energy is one of the industry's main metrics for the cost of electricity produced. It accounts for all of a system's expected lifetime costs (incl. construction, finance, fuel, maintenance, tax, insurance & incentives), which are then divided by the system's lifetime expected power output (kWh) & discounted for inflation & time cost of money.