



**Stonehenge**  
METALS LTD

10 November 2014

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



ASX Code: **SHE**

## Protean Wave Energy Transaction Completed

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Stonehenge Metals Ltd (**Stonehenge** or the **Company**) is pleased to advise that it has now executed formal transaction documents and completed the option agreement with Protean Energy Ltd (**PEL**).

The option agreement with PEL grants Stonehenge an exclusive 24 month global licence and an option to acquire 100% of the equity of Protean Energy Australia Pty Ltd (**PEA**) (the **Option**). PEA holds the intellectual property titles, rights & licenses to the Protean Wave Energy Converter Technology (**Protean WEC**).

The Protean WEC system is 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 sea bed. The device is unique in that it optimises the conversion of energy from waves at the surface through **all six degrees of wave motion**. The Protean WEC is positioned to carve out a stake in the rapidly growing global renewable energy market tipped to be worth over \$600BN by 2015<sup>1</sup>. Wave energy is a technology that offers significant energy supply potential due to wave energy's density being many times greater than that of solar or wind energy.

As a result of completion of the transaction with PEL, Mr Sean Moore (the Protean WEC inventor) and Mr Bruce Lane have now both commenced in their respective roles of Chief Technology Officer (Wave Energy) and Managing Director. Stonehenge has also agreed to provide PEL with a working capital loan of up to \$30,000, secured against the assets of PEL.

*Stonehenge Chairman Richard Henning commented; "we are delighted to be able to confirm the completion of the transaction with Protean and the formal appointment of both Sean Moore and Bruce Lane. The finalisation of these matters puts Stonehenge in an excellent position to deliver progress on both the Protean wave energy project and our South Korean projects"*

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

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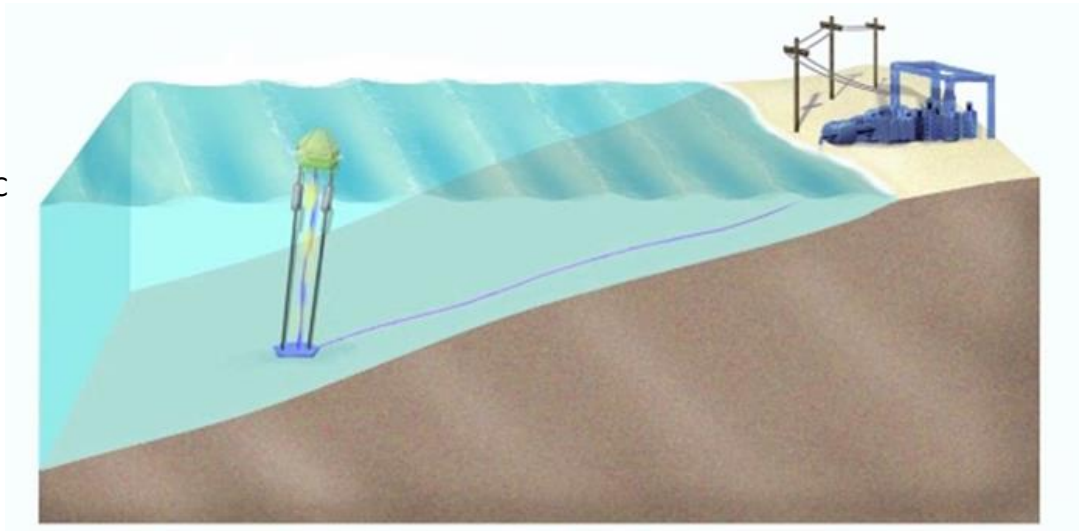
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<sup>1</sup> According to the new market research report 'Global [Renewable Energy Market](#) Outlook (2008 – 2015), published by MarketsandMarkets, the global renewable energy market is expected to reach a size of \$614.92 billion by 2015 at a CAGR of 7.5% from 2010-2015.

## ABOUT THE PROTEAN WAVE ENERGY CONVERTER (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 sea bed. 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 very efficiently from a small, low cost design targeted at keeping the projected levelised cost of energy (LCOE)<sup>2</sup> down.

The future plans for the Protean WEC include the modularisation of the proven size for the purpose of creating 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 delivery cost effective power,
4. **Verify** the results, including commissioning an independent expert to qualify the testing results; and
5. **Commence** commercialisation of the scalable array for small to medium customers.

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

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<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.

## ABOUT STONEHENGE METALS

Stonehenge Metals Limited (ASX Code: SHE) is developing a multi-mineral project in South Korea. Stonehenge owns 100% of the rights to three projects in South Korea, including the Company's flagship Daejon Project, which contains the largest uranium resource within South Korea at **66.7Mlbs** grading **329ppm U<sub>3</sub>O<sub>8</sub>** at a cut-off of **200ppm U<sub>3</sub>O<sub>8</sub>** (JORC 2004 compliant). Recently, the Company established a maiden vanadium resource of **17.3Mlbs** (largely indicated) grading **3,186ppm V<sub>2</sub>O<sub>5</sub>** at a cut-off of **2,000ppm V<sub>2</sub>O<sub>5</sub>**.

U <sub>3</sub> O <sub>8</sub> Mineral Resource Estimate at a 200 ppm U <sub>3</sub> O <sub>8</sub> cut-off			
Classification	Tonnes	Grade	Metal
	Mt	ppm	Mlbs
Indicated - Chubu	3.3	247	1.8
Inferred - Chubu	45.9	335	33.9
<b>Sub-Total Chubu</b>	<b>49.2</b>	<b>329</b>	<b>35.7</b>
Inferred - Yokwang	39	310	26
Inferred - Kolnami	7	340	5
<b>Total</b>	<b>95.2</b>	<b>329</b>	<b>66.7</b>

V <sub>2</sub> O <sub>5</sub> Mineral Resource Estimate at a 2,000 ppm V <sub>2</sub> O <sub>5</sub> cut-off			
Classification	Tonnage	Grade	Metal
	Mt	ppm	Mlbs
Indicated	2.3	3,208	16.5
Inferred	0.1	2,788	0.8
<b>Total</b>	<b>2.5</b>	<b>3,186</b>	<b>17.3</b>

Vanadium Exploration Target <sup>1</sup>		
Tonnes (Mt)	Grade V <sub>2</sub> O <sub>5</sub> (ppm)	Contained V <sub>2</sub> O <sub>5</sub> (Mlbs)
<b>70 - 90</b>	<b>2,500 - 3,500</b>	<b>385 - 695</b>

Uranium Exploration Target <sup>1</sup>		
Tonnes (Mt)	Grade U <sub>3</sub> O <sub>8</sub> (ppm)	Contained U <sub>3</sub> O <sub>8</sub> (Mlbs)
<b>15 - 59</b>	<b>300 - 500</b>	<b>17-39</b>

vanadium and uranium mineralisation through the black shales.

The geology in the Okcheon belt consists of a meta-sedimentary sequence that comprises three formations, Wunkyori, Hwajeonri & Guryongsan. The stratigraphic sequence within the belt at the Gwesan project comprises dark grey phyllite, overlain by the black shale (ore zone) & a fine grained sandstone. The historical drilling at the Gwesan project has demonstrated black shale deposits along 10km of strike. KORES completed three drill holes targeting the mineralised black shale at Gwesan in order to verify the mineralisation zone throughout the area. All three holes were drilled to a total depth of 100m and several ore zones between 3m and 11m have been intercepted in each drill hole.

The best intercept of 3500 ppm V<sub>2</sub>O<sub>5</sub> & <10 ppm U<sub>3</sub>O<sub>8</sub> in the first hole provides encouraging results (refer ASX announcement 13 Nov 2013). More drilling will be required to define the high grade mineralisation zone in the area. The mineralisation remains open at depth & along the 10km strike. The project is in its exploration stage and the additional drilling is expected to increase the potential to discover high class uranium and vanadium Mineral Resources at Gwesan. Stonehenge expects to test the validity of the exploration target

## South Korean Project Locations



<sup>1</sup> The potential quantity & grade of the exploration target is conceptual in nature, there has been insufficient exploration to define a Mineral Resource & it is uncertain if further exploration will result in the definition of a Mineral Resource.

The vanadium and uranium exploration targets are based on exploration results from the 2013 drilling at Chubu & Gwesan (refer announcements 15 July & 13 November 2013) that demonstrated

once access to historical drill core is obtained and the Company is able to assay the core for vanadium mineralisation.

The Company is continuing its efforts to access the core and further updates on this progress will be advised as soon as it becomes available. This information was prepared and first disclosed under the JORC Code 2004 (refer ASX announcement 29 Aug 2013). It has not been updated since to comply with the JORC Code 2012 on the basis that the information has not materially changed since it was last reported.

### **Competent Person's statement**

The information contained in this ASX release relating to exploration results and Mineral Resources has been compiled by Mr. Ian Glacken of Optiro Ltd. Mr. Glacken is a Fellow of The Australian Institute of Mining and Metallurgy and has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Mr Glacken consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.