



**Stonehenge**  
METALS LTD

## QUARTERLY ACTIVITIES REPORT

PERIOD ENDING 30 SEPTEMBER 2015

Stonehenge Metals Limited  
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Enquiries regarding this report may be directed to:

**Bruce Lane**  
Managing Director

**Matthew Foy**  
Company Secretary



ASX CODE: SHE

### HIGHLIGHTS

- Completion of the fully assembled workshop testing and the functional ocean based testing of the Protean™ wave energy converter technology
- Approval to deploy 30 Protean™ devices off the coast of Western Australia at Bunbury
- Commercial pilot Protean™ wave farm planned for Hanimaadhoo Island, Maldives via option to acquire Clean Energy Maldives Pvt Ltd
- Key executives re-contract to the Company
- Completion of sale of 50% of Stonehenge Korea Ltd to Korean Resources Investment & Development Inc. (**KORID**)
- Successful completion of placement to raise \$500,000 to sophisticated investors via the issue of 12,500,000 new shares at \$0.04

Stonehenge Metals Limited (ASX:SHE) (**Stonehenge** or the **Company**) is pleased to provide shareholders with the following quarterly activities report for the September quarter.

## **Protean™ Wave Energy Technology**

During the quarter, the Company advised that the fully assembled workshop testing of the core energy conversion system components of the Protean™ wave energy converter (**WEC**) technology was successfully concluded. Building on the success of this workshop testing, the Company commenced functional ocean based testing of a fully assembled proof of commercial applicability Protean™ WEC device. This testing was also successfully completed. Preparations for fabrication of the 30 Protean™ WEC buoys which make up the planned pre-commercial demonstration wave farm has also commenced.

In addition, Stonehenge received approval to deploy a demonstration wave farm, in the form of 30 Protean™ WEC buoys, off the coast of Western Australia at Bunbury. The plan to deploy the demonstration wave farm signals progression to the next stage in the Company's early commercialisation strategy.

During the quarter, the Company entered into an exclusive option to acquire 99% of Clean Energy Maldives Pvt Ltd (**CEM**). The management of CEM has the approval and local support to facilitate the establishment of a commercial wave energy converter power generation and seawater desalination facility off the coast of Hanimaadhoo Island, Maldives.

## **Stonehenge Korea**

During the quarter, Stonehenge completed the formal joint venture (**JV**) with KOSDAQ listed Korean Resources Investment & Development Inc. (**KORID**). The JV is created via the sale to KORID of 50% of Stonehenge Korea Ltd. The JV is initially focused on accelerating development of the Daejon vanadium and uranium project by conducting work to contribute to the preparation of a pre-feasibility study. The JV aims to:

- secure a collaboration agreement with the Korea Institute of Geoscience and Mineral Resources (**KIGAM**) to test the relevant sections from within the 36,000 metres of mineralised historical drill core (from Stonehenge Korea's Daejon Project area) stored at KIGAM; and
- significantly upgrading the current Daejon Project resource estimates in size and or confidence.

The Company also advised that JV partner KORID had sold 20% of its holding in the Korean JV entity, Stonehenge Korea Ltd (**SHK**), to BHI Co Ltd (**BHI**). KORID and BHI have together agreed to be bound by the terms of the existing SHK shareholder agreement. In consideration for the sale of SHK shares to BHI, KORID received KWON 1 Billion (~A\$1.15 million).

## **Corporate**

### **Convertible Loan Facility**

On 1 July 2015, the Company entered into a convertible loan facility for up to \$300,000 (**Loan**) with a small number of sophisticated investors (**Lenders**). The Loan is convertible, subject to shareholder approval, into ordinary shares and attaching options. The conversion price for the issue of shares will be 3.5 cents per share which represents a 20% discount to the 10-day VWAP for the 10 traded days prior to 1 July 2015 (**Conversion Price**). One free attaching option will be issued, for every two shares issued on conversion, with a strike price of 5.3 cents, which represents a 50% premium to the Conversion Price.

The Loan will be drawn down as required by the Company and can be converted at any point after the Company completes a capital raising of at least \$2 million and between the granting of shareholder approval and the repayment date of 31 December 2015.

On 11 August 2015, the Company entered into an additional loan facility for up to \$300,000 with the same Lenders (and also one of the Company's directors, Mr Bevan Tarratt) and terms and conditions as the Loan on 1 July 2015.

## Capital Raising

During the quarter, the Company completed a placement to raise \$500,000 to sophisticated investors via the issue of 12,500,000 new shares at \$0.04 per share (**Placement**). The Placement was made pursuant to the Company's existing placement capacity under ASX Listing Rule 7.1. ASX will not quote the Placement securities until following re-compliance and ASX escrow provisions will apply. Funds raised under the Placement will be used to fund continuing operations, completion of the acquisition and re-compliance with ASX Listing Rules.

## Option Exercise, Name Change and Re-compliance with ASX Listing Rules

Building on the success of the testing program, during the quarter, Stonehenge formalised its intention to complete the acquisition of 100% of the Protean™ intellectual property by exercising its rights under the option agreement (**Option**) between the Company and Protean Energy Pty Ltd (**PEL**). Pursuant to the Option the Company has entered into a Share Sale and Purchase Agreement with PEL, which specifies the terms on which the Company agrees to acquire 100% of the issued capital of Protean Energy Australia Pty Ltd (**PEA**) from PEL (**Acquisition**).

As part of the Acquisition, the Company will seek the approval of shareholders to change its name to Protean Wave Energy Limited. The Acquisition will result in a change in the Company's nature and scale of activities, requiring shareholder approval under Chapter 11 of the ASX Listing Rules and the Company will need to re-comply with Chapters 1 and 2 of the ASX Listing Rules. In order to re-comply with the ASX Listing Rules the Company expects to seek shareholder approval to, amongst other things, issue a re-compliance prospectus to raise sufficient funds to accelerate commercialisation of the Protean WEC technology. A notice of meeting to seek approval for the above matters, including the quantum of the capital raising, is expected to be dispatched shortly.

## Executive Team Contracts

During the period, the Company announced that Managing Director Bruce Lane, Sean Moore (Protean™ WEC Inventor & Chief Technology Officer) and Scott Davis (General Manager Business Development) have agreed to re-contract to the Company subject to the completion of the 100% acquisition of PEA and successful re-compliance with ASX Listing Rules.

In addition, subject to re-compliance, the Company has also agreed to grant Moore Commerce Pty Ltd (a company owned by Sean Moore) a 5% share of net profit relating to each commercial Protean™ wave farm project commissioned in the future. Moore Commerce Pty Ltd is also the exclusive provider of design, manufacture, deployment and project management services for Protean™ WEC wave farm deployments.

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

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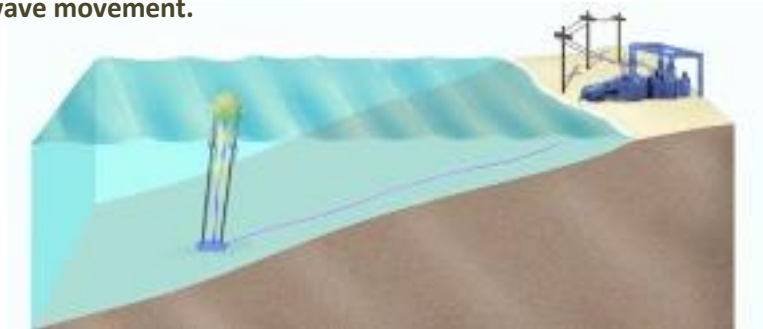
## MORE ON: THE PROTEAN™ WAVE ENERGY CONVERTER (WEC) TECHNOLOGY



Stonehenge has exercised its option to acquire the Protean™ WEC technology and completion of the acquisition is now subject to Stonehenge successfully re-complying with ASX Listing Rules.

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 cost of energy down. The Protean™ WEC has been designed to be cost competitive to manufacture, deploy and maintain. The future plans for the Protean™ WEC include the deployment of a pre-commercial demonstration of a scalable power array (wave farm) prior to moving the technology into early commercialisation. The Stonehenge assessment program aims to:

1. **Refine** the 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 demonstration wave farm 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 (wave farm) for small to medium customers.

ACHIEVEMENTS TO DATE Successfully Tested Prototype	PRESENT AND FUTURE OBJECTIVES Deploy Demonstration Wave Farm
<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 verified from test results.</li> <li>➤ Simple patented deployment system demonstrated.</li> <li>➤ 1m wide “proof of commercial applicability” unit with key design improvements successfully demonstrated.</li> </ul>	<ul style="list-style-type: none"> <li>➤ Identify and secure deployment sites and customers.</li> <li>➤ Deploy 30 buoy demonstration Protean™ wave farm.</li> <li>➤ Verify Protean as scalable power/water supply solution.</li> <li>➤ Commence commercial pilot project.</li> <li>➤ Target remote island, port and coastal industry users</li> </ul>

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

## MORE ON: STONEHENGE KOREA LIMITED

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>

Stonehenge Metals Limited (ASX Code: SHE) is developing a multi-mineral project in South Korea through its 50% holding in Stonehenge Korea Limited. Stonehenge Korea Limited 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>**.

<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 and 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 and Gwesan (refer announcements 15 July & 13 November 2013) that demonstrated 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 and Guryongsan. The stratigraphic sequence within the belt at the Gwesan project comprises dark grey phyllite, overlain by the black shale (ore zone) and 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 November 2013). More drilling will be

required to define the high grade mineralisation zone in the area. The mineralisation remains open at depth and 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 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 August 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.

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>

required to define the high grade mineralisation zone in the area. The mineralisation remains open at depth and 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 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 August 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.

## Appendix 1 - Stonehenge Korea Limited Tenement Details

Registration Number	Land Register	Number	Area (ha)	Interest %	Registration Date	Registrant	Property
76967	Gwesan	114	275	100%	28/05/2008	Stonehenge Korea	<b>Gwesan</b>
76942	Gwesan	115	275	100%	14/05/2008	Stonehenge Korea	
76965	Gwesan	117	275	100%	28/05/2008	Stonehenge Korea	
76966	Gwesan	118	275	100%	28/05/2008	Stonehenge Korea	
76964	Gwesan	124	275	100%	28/05/2008	Stonehenge Korea	
76941	Gwesan	125	275	100%	14/05/2008	Stonehenge Korea	
76968	Gwesan	126	275	100%	28/05/2008	Stonehenge Korea	
76969	Gwesan	128	275	100%	28/05/2008	Stonehenge Korea	
79161	Gwesan	137	275	100%	12/01/2011	Stonehenge Korea	
77018	Miwon	36	276	100%	11/06/2008	Stonehenge Korea	
77019	Miwon	46	276	100%	11/06/2008	Stonehenge Korea	
77020	Miwon	58	276	100%	11/06/2008	Stonehenge Korea	
77225	Miwon	37	276	100%	21/08/2008	Stonehenge Korea	
77291	Miwon	47	276	100%	23/09/2009	Stonehenge Korea	
77292	Miwon	57	276	100%	23/09/2009	Stonehenge Korea	
77010	Okcheon	136	138	100%	10/06/2008	Stonehenge Korea	<b>Daejon</b>
77011	Daejon	18	277	100%	10/06/2008	Stonehenge Korea	
77012	Daejon	28	259	100%	10/06/2008	Stonehenge Korea	
77013	Daejon	38	277	100%	10/06/2008	Stonehenge Korea	
77014	Daejon	48	277	100%	3/07/2008	Stonehenge Korea	
77038	Ogchon	147	277	100%	19/06/2008	Stonehenge Korea	
77039	Daejon	17	103	100%	19/06/2008	Stonehenge Korea	
77114	Daejon	7	190	100%	3/07/2008	Stonehenge Korea	
77115	Daejon	27	56	100%	3/07/2008	Stonehenge Korea	
77363	Daejon	47	242	100%	16/10/2008	Stonehenge Korea	
77364	Daejon	57	186	100%	16/10/2008	Stonehenge Korea	
200204	Daejon	59	228	100%	18/12/2012	Stonehenge Korea	