



Stonehenge
METALS LTD



ASX CODE: SHE

QUARTERLY ACTIVITIES REPORT

PERIOD ENDING 30 JUNE 2015

Stonehenge Metals Limited

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Company Secretary

HIGHLIGHTS

- Agreements signed with San Marino Venture Group and Yanchep Beach Joint Venture (**YBJV**) to provide support and progress the commercialisation of the Protean Wave Energy Converter (**WEC**), including the potential development of a Protean WEC wave farm off the coast of Western Australia
- MOU signed with Cal Poly to support application for US\$1.5 million award offered by the U.S Department of Energy (**DOE**)
- Major structural component build, assembly and workshop testing of a single Protean WEC complete
- Ocean based wet testing now in progress
- Two key appointments made with Mr Brendan Hammond appointed as Chairman of the Board and Mr Scott Davis as advisor to the Company, both industry veterans bringing significant experience and expertise
- The sale of 50% of Stonehenge Korea Ltd to Koran Resources Investment & Development Inc. (**KORID**) has now been completed to create a joint venture (**JV**)

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

Protean Wave Energy

During the quarter, the Company engaged California-based San Marino Venture Group LLC (**SMVG**) to provide advisory support for the commercialisation of the Protean Wave Energy Converter (**WEC**) technology in the U.S as part of the Company's global commercialisation strategy. SMVG has a highly experienced and skilled team and is expected to add credibility and the know-how to commercialise the Protean WEC technology in the U.S.

Stonehenge also signed a Memorandum of Understanding with California Polytechnic University at San Luis Obispo (**Cal Poly**) to support their application for a US\$1.5 million award offered by the U.S Department of Energy (**DOE**). The funding is to support the next phase of the Cal Wave initiative, which is one of a number of projects created under the Institute for Advanced Technology and Public Policy (**IATPP**) at Cal Poly. The mission of the IATPP is to develop and promote practical solutions to real world problems by informing and driving public policy. The Cal Wave project is in place to assess the feasibility of siting the planned National Wave Energy Test Facility in California and has to date been funded by the DOE through an initial \$750,000 funding award. Stonehenge will serve as a contributing WEC technology proponent, with the potential to be deployed into the facility in California.

The Company also signed a Memorandum of Understanding with Yanchep Beach Joint Venture (**YBJV**) for collaboration on the development of a Protean WEC wave farm off the coast of Western Australia to potentially supply the community at Two Rocks. The Memorandum of Understanding supports Stonehenge's commercialisation strategy and will initially begin with a single 1.5 kW buoy followed by a 30x1.5 kW buoy (45 kW) demonstration wave farm.

In addition, during the quarter the Company completed the major structural component build and assembly of the Protean WEC, a landmark event in the Company's development path. Bench testing and calibration of core energy conversion system components is now concluded with ocean based wet testing now in progress.

The Company has progressed well with the development of Protean WEC technology and its go to market commercialisation strategy. During the quarter, the Company established a number of key partnerships in the U.S to secure further funding and accelerate its path to market.

Stonehenge has also been focused on opportunities in Australia as it looks to establish an offshore wave farm in Western Australia with Yanchep Beach Joint Venture to potentially supply the community at Two Rocks.

Fabrication of the 30 WEC buoy array, which will make up the planned demonstration wave farm, is expected to commence once the wet testing of the individual Protean WEC buoy is successfully concluded.

Stonehenge Korea

Subsequent to 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 Korean 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.

Corporate

In June 2015, the Company appointed Mr Brendan Hammond as Chairman of the Board. Mr Hammond has a wealth of experience within the resources, energy and infrastructure industries. The Stonehenge board believes that Brendan's unique mix of experience and skills, combined with his passion for sustainable development, positions him to be a very effective chairman of the Company's board. We are particularly looking forward to leveraging the experience and networks he has built up through his roles as Chairman of Horizon Power, Chairman of Dampier Port Authority, board member for the Water Corporation (WA), Managing Director of Argyle Diamonds (Rio Tinto) and development approvals consultant to the Premier of Western Australia. Mr Richard Henning resigned from the board effective 1 July 2015.

Convertible Loan Facility

Subsequent to the quarter 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 with 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 this announcement (**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.

The Facility may, by mutual agreement with the Lenders, be increased by up to an additional \$300,000 on the same terms as the initial Principal Amount.

A notice of meeting to approve the convertibility of the debt will be despatched to shareholders in due course.

For further information visit: www.stonehengemetals.com.au or www.proteanwavenergy.com.au

Stonehenge Metals Limited

Bruce Lane – Executive Director

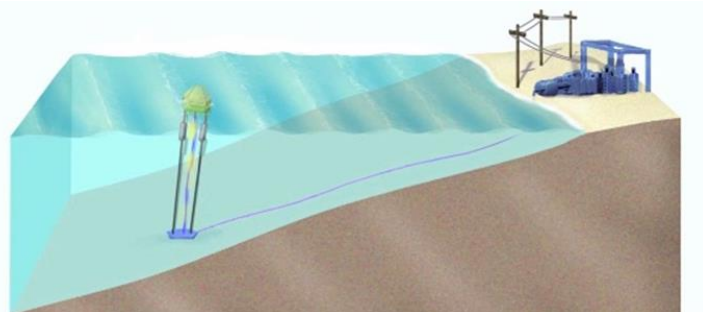
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ABOUT THE PROTEAN WAVE ENERGY CONVERTER (WEC) TECHNOLOGY

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)¹ 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, Construction and Deployment

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

For further information visit: www.proteanwaveenergy.com.au or www.stonehengemetals.com.au

¹ 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 KOREA LIMITED

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 U₃O₈** at a cut-off of **200ppm U₃O₈** (JORC 2004 compliant). Recently, the Company established a maiden vanadium resource of **17.3Mlbs** (largely indicated) grading **3,186ppm V₂O₅** at a cut-off of **2,000ppm V₂O₅**.

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

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

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

Uranium Exploration Target ¹		
Tonnes (Mt)	Grade U ₃ O ₈ (ppm)	Contained U ₃ O ₈ (Mlbs)
15 - 59	300 - 500	17-39

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 V₂O₅ & <10 ppm U₃O₈ 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



¹ 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 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	Goesan [Gwesan]
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	Miwon
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	Daejon [Daejeon]
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	