ASX:SHE



New Project Acquistion

Protean™ Wave Energy Conversion Technology

Company Presentation

September 2014

Stonehenge
METALS LTD

Forward Looking and Competent Person Statement

Certain statements contained in this presentation may constitute forward looking statements. Such forward-looking statements involve a number of known and unknown risks, uncertainties and other factors which may cause the actual results, performance of achievements of Stonehenge Metals Limited (the Company) to be materially different from actual future results and achievements expressed or implied by such forward-looking statements. Investors are cautioned not to place undue reliance on these forward-looking statements. The information contained herein has been prepared solely for informational purposes and is not an offer to buy or sell or a solicitation of any offer to buy or sell any security or to participate in any trading strategy or to enter into any transaction. If any offer of securities is made, it shall be made pursuant to a definitive offering memorandum prepared by or on behalf of any fund or other issuer which would contain material information not contained herein and which would supersede this information in its entirety.

Minerals Exploration: This presentation may describe Measured, Indicated and/or Inferred Resources. Inferred Resources have a greater amount of uncertainty as to their existence and greater uncertainty as to their economic feasibility. It cannot be assumed that all or any part of any Inferred Resource will ever be upgraded to a higher category. The potential quantity and grade of the Daejon Uranium Project Conceptual Exploration Targets is conceptual in nature and there has been insufficient exploration to define a Mineral Resource and it is uncertain if further exploration will result in the determination of a Mineral Resource.

Exploration is an inherently risky proposition and investors are advised that most exploration projects fail to identify economic resources. The Company has at present not confirmed the economic viability of any resources at the project. The Company plans further drilling programmes and studies with the objective of confirmation of any deposits and ultimately completing a feasibility study to demonstrate the economics of the resources.

Competent Person 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.

Renewable Energy Technology Development: The valuations, forecasts, estimates, opinions & projections contained herein involve elements of subjective judgment and analysis. The information contained herein has not been independently verified, nor do we make any representation or warranty, either express or implied, as to the accuracy, completeness or reliability of the information contained in this presentation. This presentation should not be regarded by the Recipient as a substitute for the exercise of its own judgment and the Recipient is expected to rely on its own due diligence if it wishes to proceed further. The information contained in this presentation is intended for information purposes only and is not intended to be a comprehensive list of the matters that need to be considered by the Recipient nor is it intended to replace or supplement legal or investment advice given in relation to the subject matter.

Corporate Information

Corporate Structure

Shares on issue:	429 million
Latest share price:	0.7c
Market capitalisation:	~$3 million

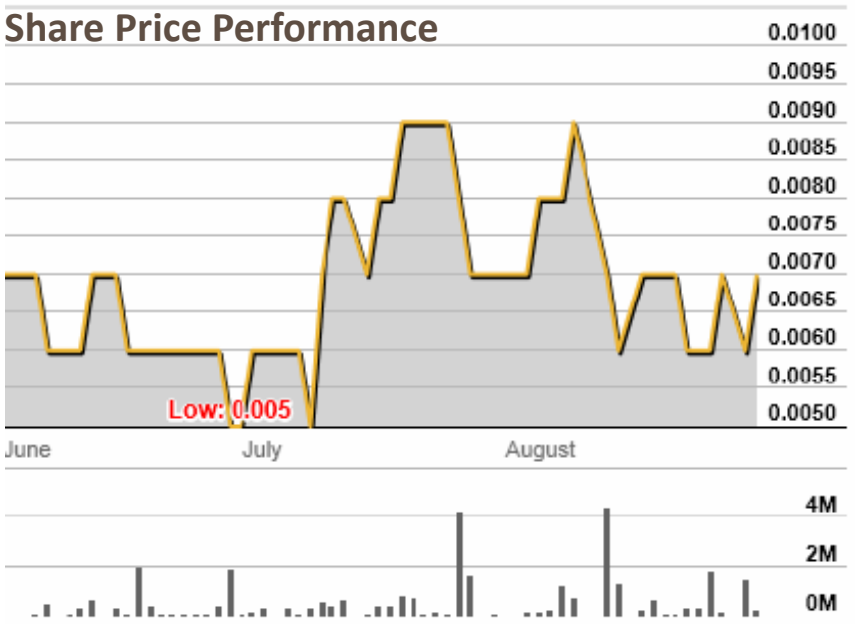
Directors and Management

Richard Henning – Chairman
Bruce Lane – Executive Director (MD Designate)
Young Yu – Non Executive Director
Bevan Tarratt – Non Executive Director

Top Shareholders

Directors and management	~14.0%*
Slade Technologies	2.3%

*Incl. JLC Corporation Pty Ltd 6.55%
Top 20 holds 39% of issued shares

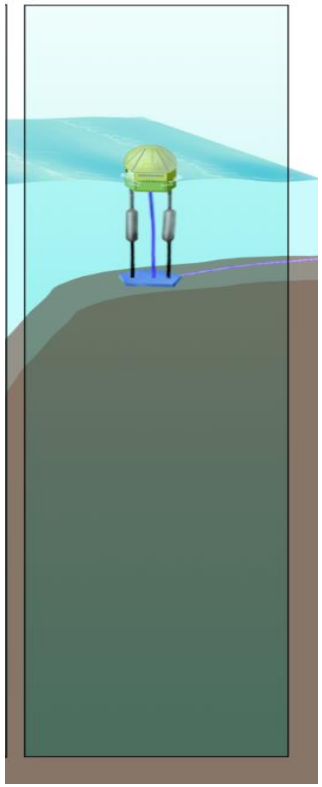


New Project Acquistion – Protean Energy

Option to acquire PEA[1]: owner of the **Protean™ Wave Energy Converter (WEC)**

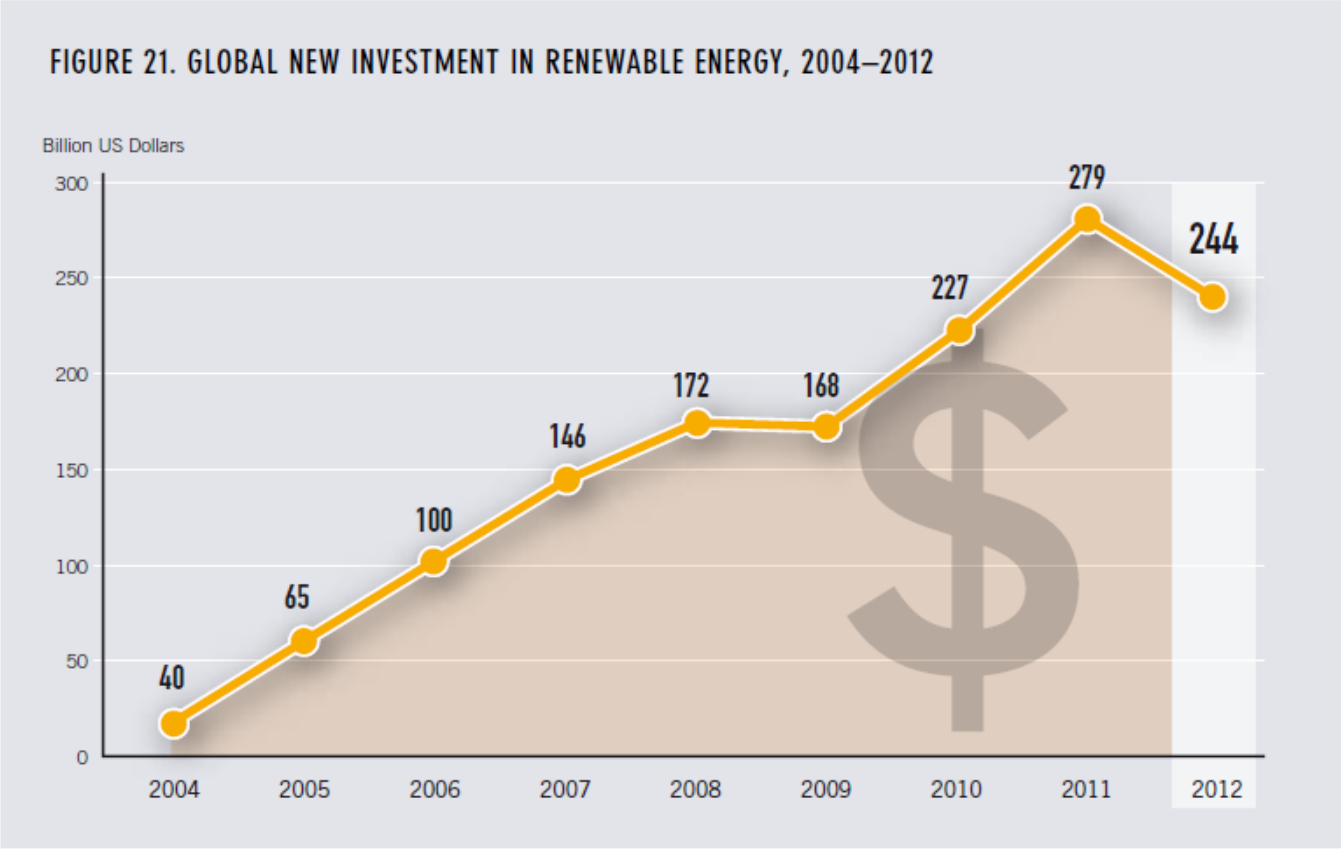
- Protean is a revolutionary new wave energy conversion technology (**Protean™ WEC Technology**)

- Potential applications for the Protean WEC Technology include:
  - Utility & small scale power plants
  - Remote installations and near shore power
  - Offshore power applications
  - Self powered sonar/radar systems & border security
  - Aquaculture – fish farming
  - Seawater desalination potable (drinking) water from the sea



[1] Protean Energy Australia Pty Ltd

Global Investment In Renewable Energy



Source:
See Endnote 1
for this section.

Graph sourced from Renewable Energy Policy Network for the 21st Century. *Renewables 2013 Global Status Report.* Status Report, Milan: REN21, 2013.

i This section is derived from Frankfurt School – UNEP Collaborating Centre for Climate & Sustainable Energy Finance (FS-UNEP) and Bloomberg New Energy Finance (BNEF), *Global Trends in Renewable Energy Investment 2013* (Frankfurt: 2013), the sister publication to the GSR. Figures are based on the output of the Desktop database of BNEF unless otherwise noted. The following renewable energy projects are included: all biomass, geothermal, and wind generation projects of more than 1 MW; all hydro projects of between 1 and 50 MW; all solar power projects, with those less than 1 MW estimated separately and referred to as small-scale projects or small distributed capacity; all ocean energy projects; and all biofuel projects with an annual production capacity of 1 million litres or more. For more detailed information, please refer to the FS-UNEP/BNEF *Global Trends* report.

ii Investment in large hydropower (>50 MW) and solar water collectors is not included in the overall total for investment in renewable energy. BNEF tracks only hydropower projects of between 1 MW and 50 MW, and solar water collectors are not included with small-scale projects because they do not generate power.

Wave – Massive Energy Concentration

“To Scale”
Energy Density
Comparison





Solar



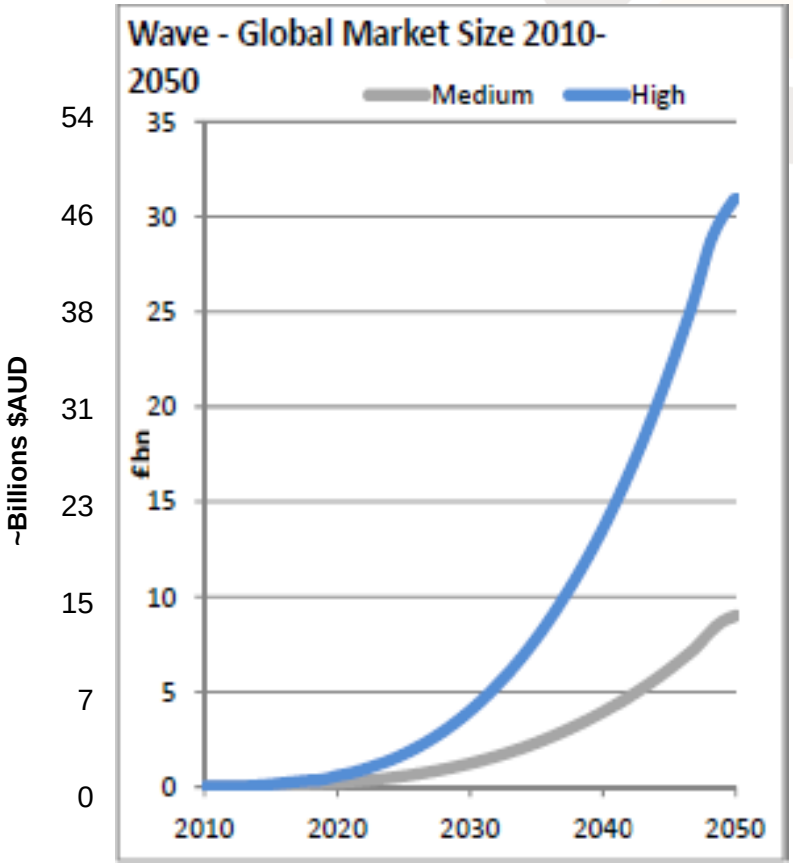
Wind

Wave

Stonehenge
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The Opportunity Is Significant

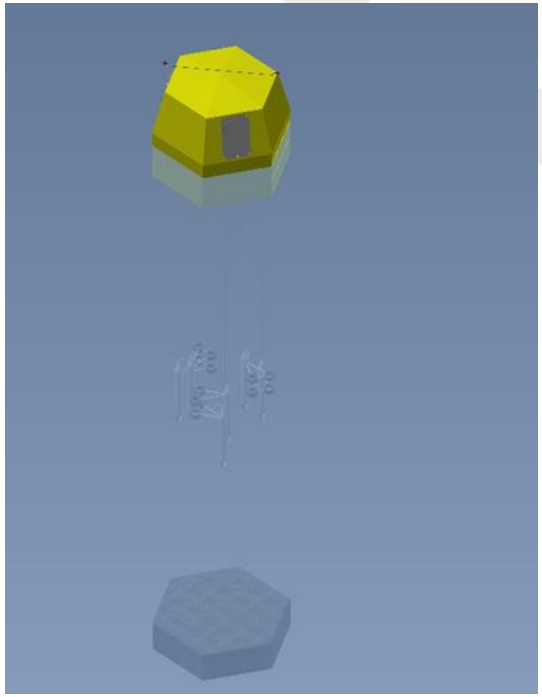
"The wave energy market is forecast to be substantial by 2050" [1]

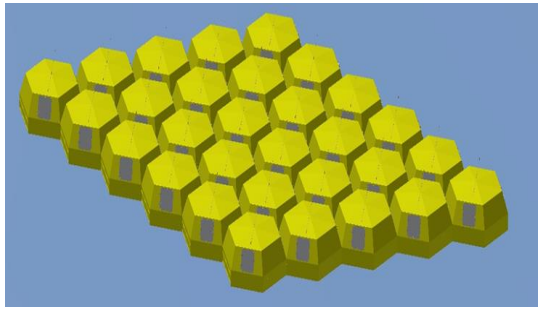


[1] Graph & quote are from a report on the market for renewable energy by The UK Carbon Trust. The Carbon Trust Ltd is an independent not for profit company established by the UK Government.

Plan to Develop Protean

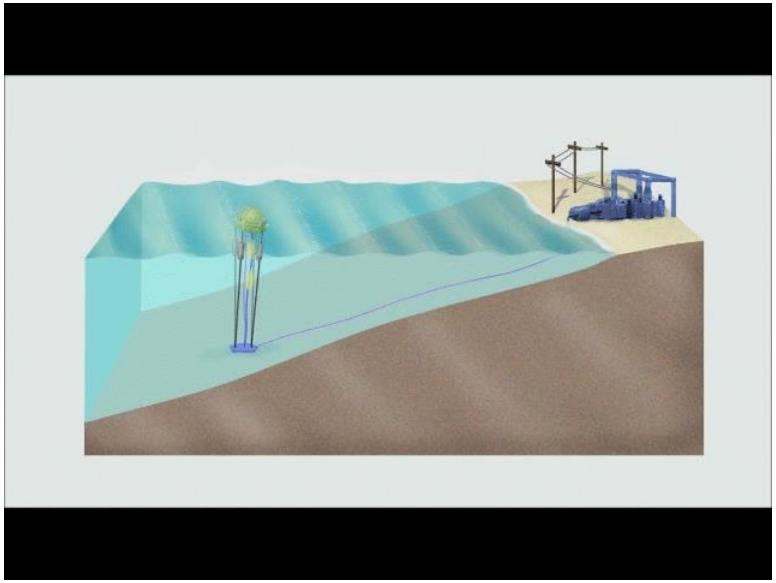
- Deliver a pre-commercial pilot array (targeting installation in Western Australia)
  - Fixed price (A$500k) Turnkey contract to deliver pilot project within 18 months
  - Test a power generation array of 30 x Protean™ WEC buoys (each buoy 1.5kWH)
  - Test the transmission setup in preparation for full commercial trials
  - Commission an independent report
- Deploy larger scale pilot
- Commercialise array for small/medium customers
- Seek Australian & international strategic alliances (for deployments, testing & funding)





Unique Buoy and Tethering System

- The Protean WEC buoy converts relative movement, between the static ocean floor and the floating buoy, into energy



- The Protean™ technology has no exposed turbines that are dangerous to marine life and each unit has a small environmental footprint
- An innovative tension mooring system uses cables running from a clump weight on the sea floor to the Protean WEC buoy on the surface

Protean Is Different

1. The Protean WEC uniquely converts **all 6** degrees of wave motion into usable energy

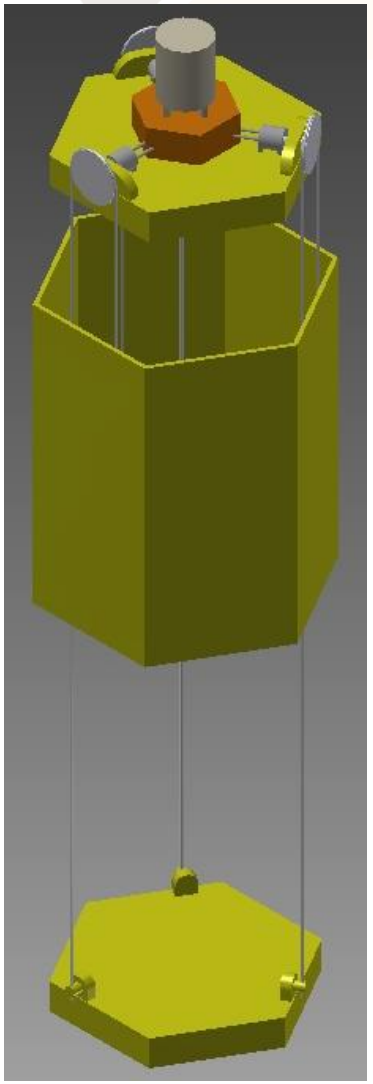
2. Maximum energy is extracted from wave motion @ **Surface**

3. The Protean offers “game changing” power generation to weight/cost metrics

4. The Protean is designed to be configurable for virtually all wave resources from low to high wave energy locations

How It Works

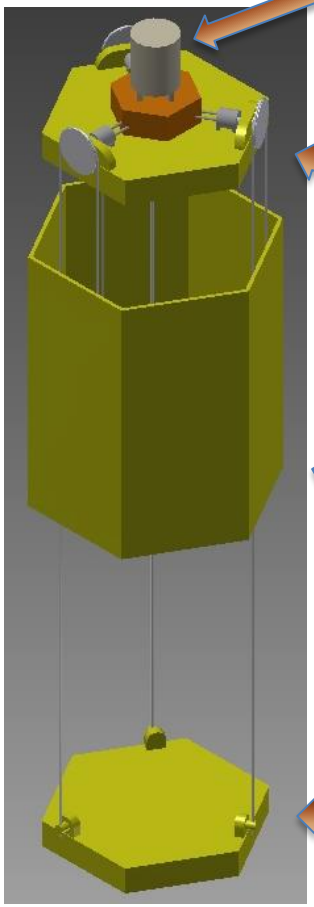
1. waves move past the buoy causing the buoy to move in a circular manner
2. as the buoy moves the counterweights also move, thereby continuously lengthening and shorting the mooring cables which, being hung over the pulleys, cause the pulleys to rotate
3. as the pulleys rotate, shaft power‡ is created. Each shaft is connected directly to either an electric, hydraulic or water pump to convert the wave energy directly into a useful form
4. the pulleys are free to rotate in either direction with the oscillations being internally rectified via simple energy flow means



‡ *Shaft power is one of the most elementary means of power transmission & is easily integrated into a wide variety of commonly used generation means such as hydraulic or electric systems*

This image is a stylised representation of the Protean WEC & does not accurately represent the actual equipment

How It Works



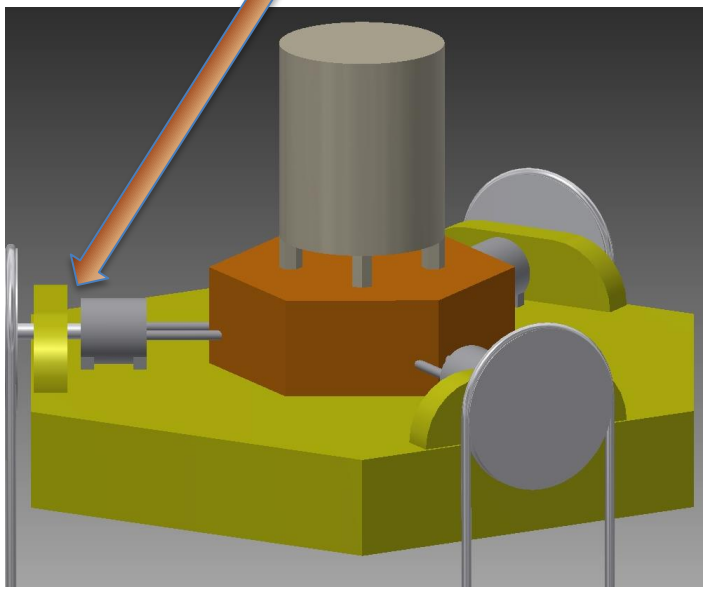
The power from each pulley is unified and used to produce power or desalinate water

The pulley rotates with the counterweight motion – producing direct-drive shaft power

The counterweight moves up and down with the buoy under wave motion

The seabed mooring and mooring lines keep the device in place

The drive shaft turns the energy conversion mechanism directly

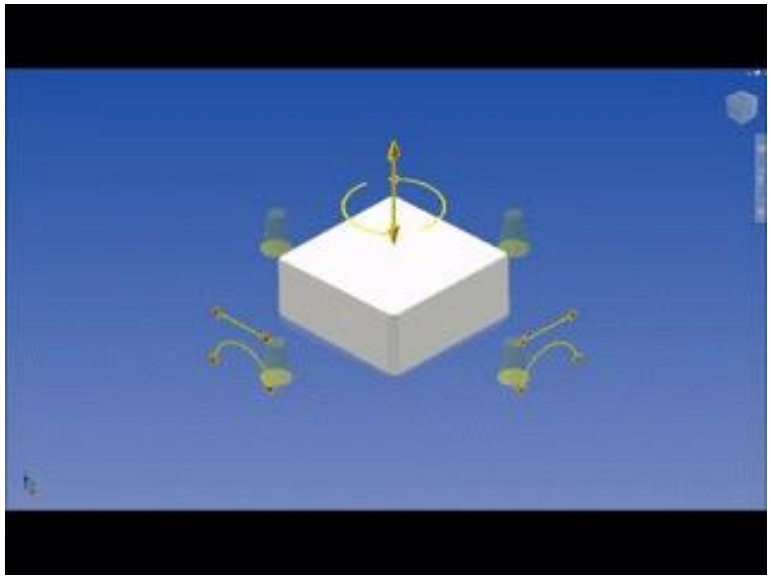


These images are stylised representations of the Protean WEC & do not accurately represent the actual equipment

Protean - Optimised for Wave Energy Conversion

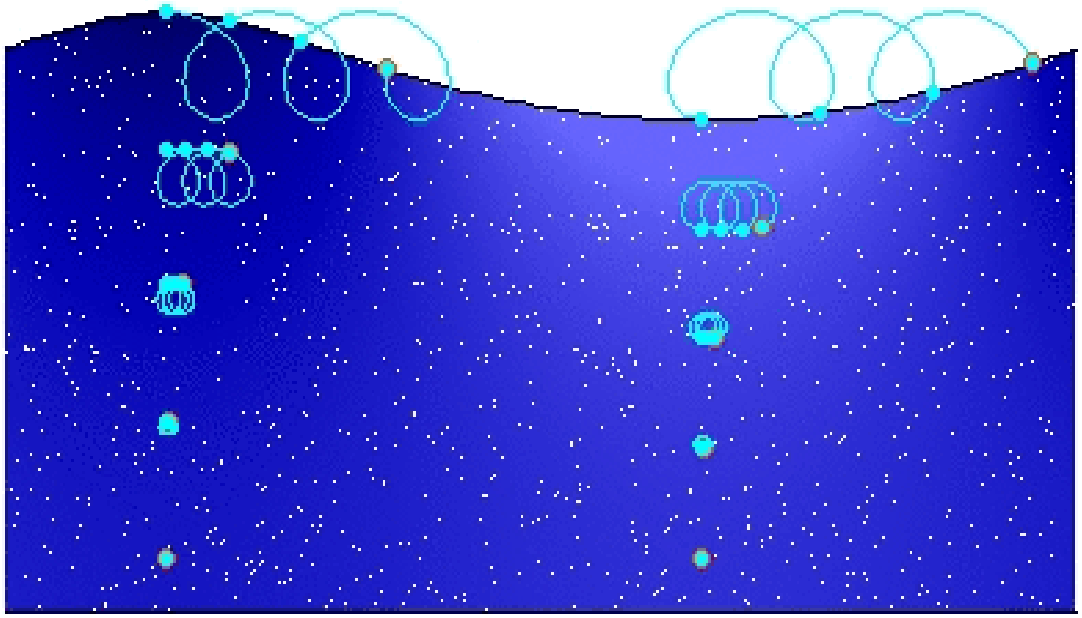
- In order to maximise the amount of energy converted, it is important that a wave energy converter uses all 6 degrees of wave motion to collect energy.

1. up-down (heave)
2. back-and-forth (surge)
3. side-to side (sway)
4. yaw
5. pitch
6. roll



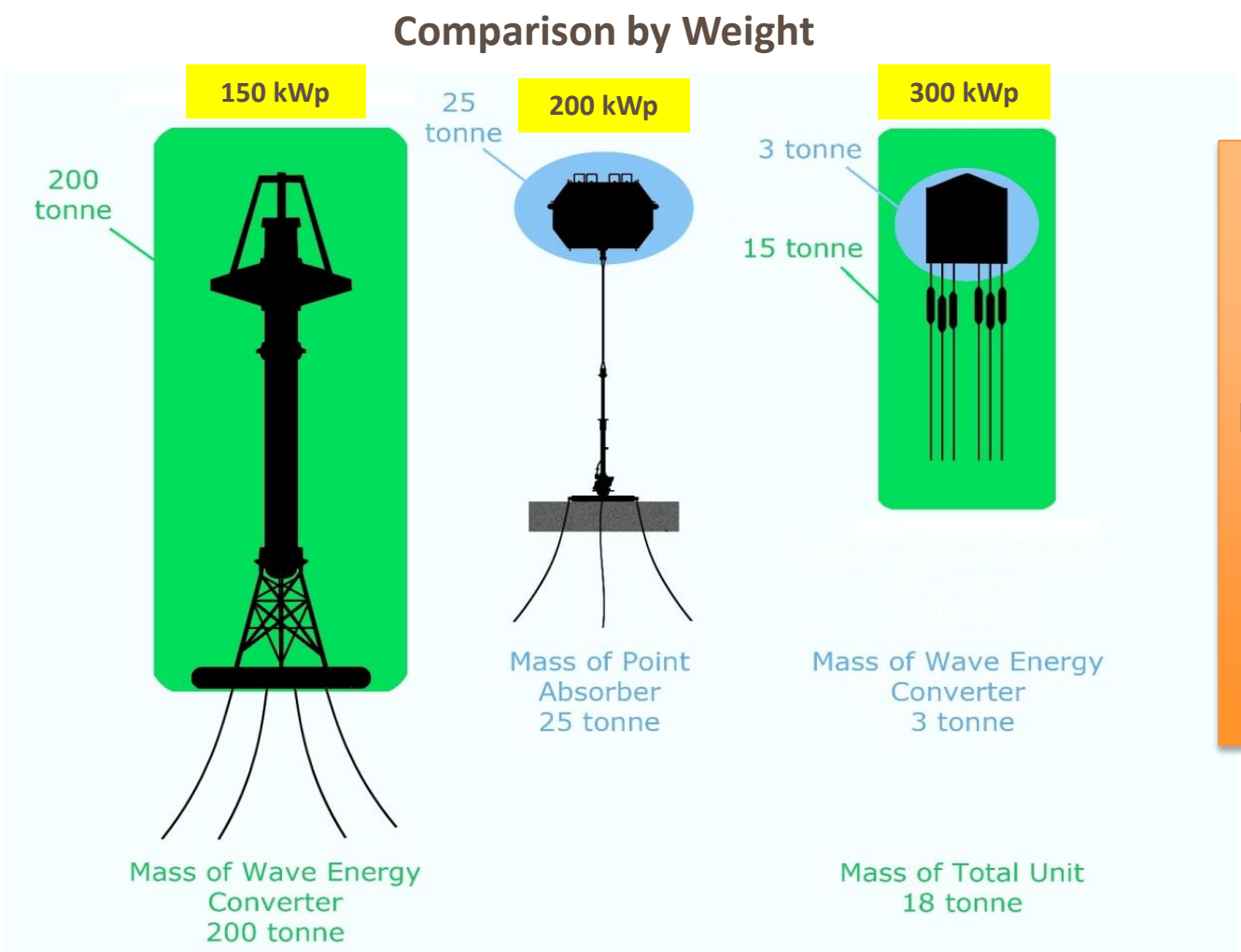
Maximum Wave Energy @ Surface

- Animation shows the reduction in energy density as ocean depth increases



- Maximum energy is extracted from all 6 degrees of wave motion @ **Surface**

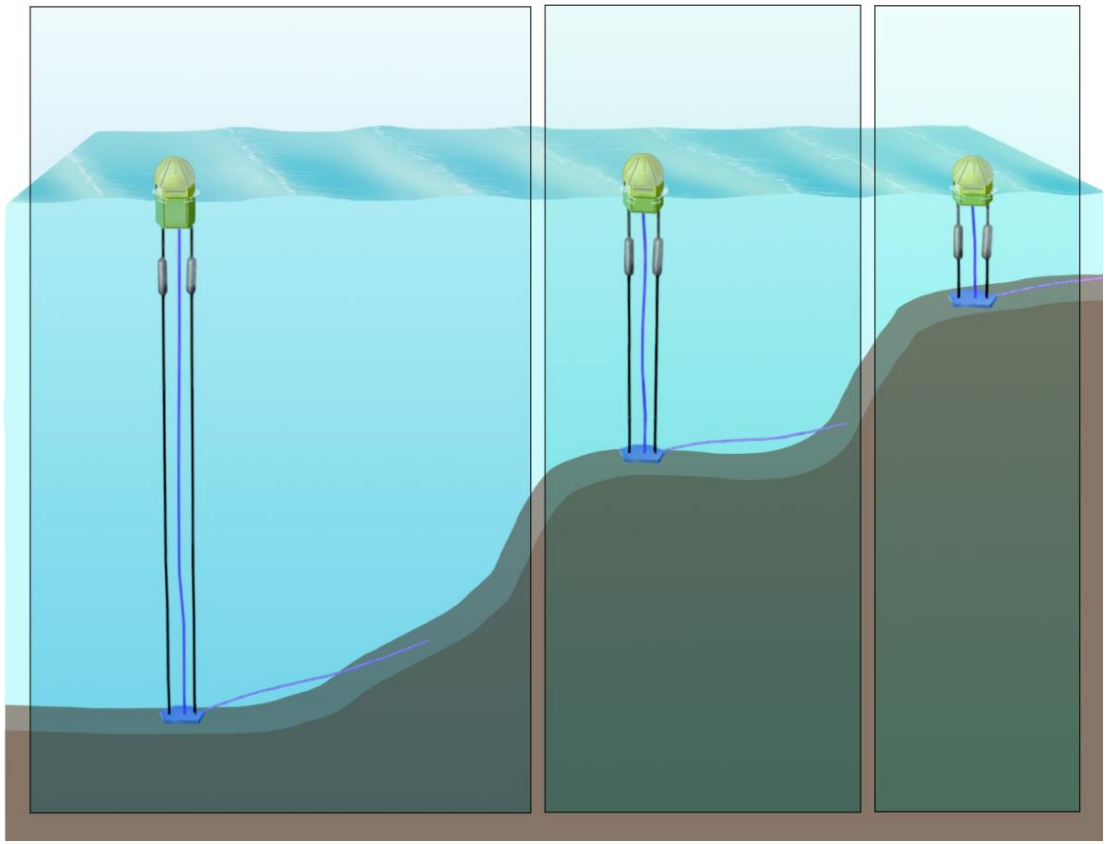
Protean - Excellent Generation To Weight Metrics



Protean™ uses compact architecture to produce power from a small, low cost design thus keeping the cost of energy down

This figure is a representation based on publicly available information for competitors 1 & 2 compared with as yet untested projections for a large scale Protean device used in an offshore environment.
The competitor 1 & 2 devices depicted are for illustration purposes only & may not be the only or most recent devices of a competitor.

Deployable At Variable Depths



- The Protean™ technology is designed to work in a variety of depths
- From near shore (shallow water) all the way to offshore (deep water) where wave energy is the greatest

Competitive Advantages From Efficient Design



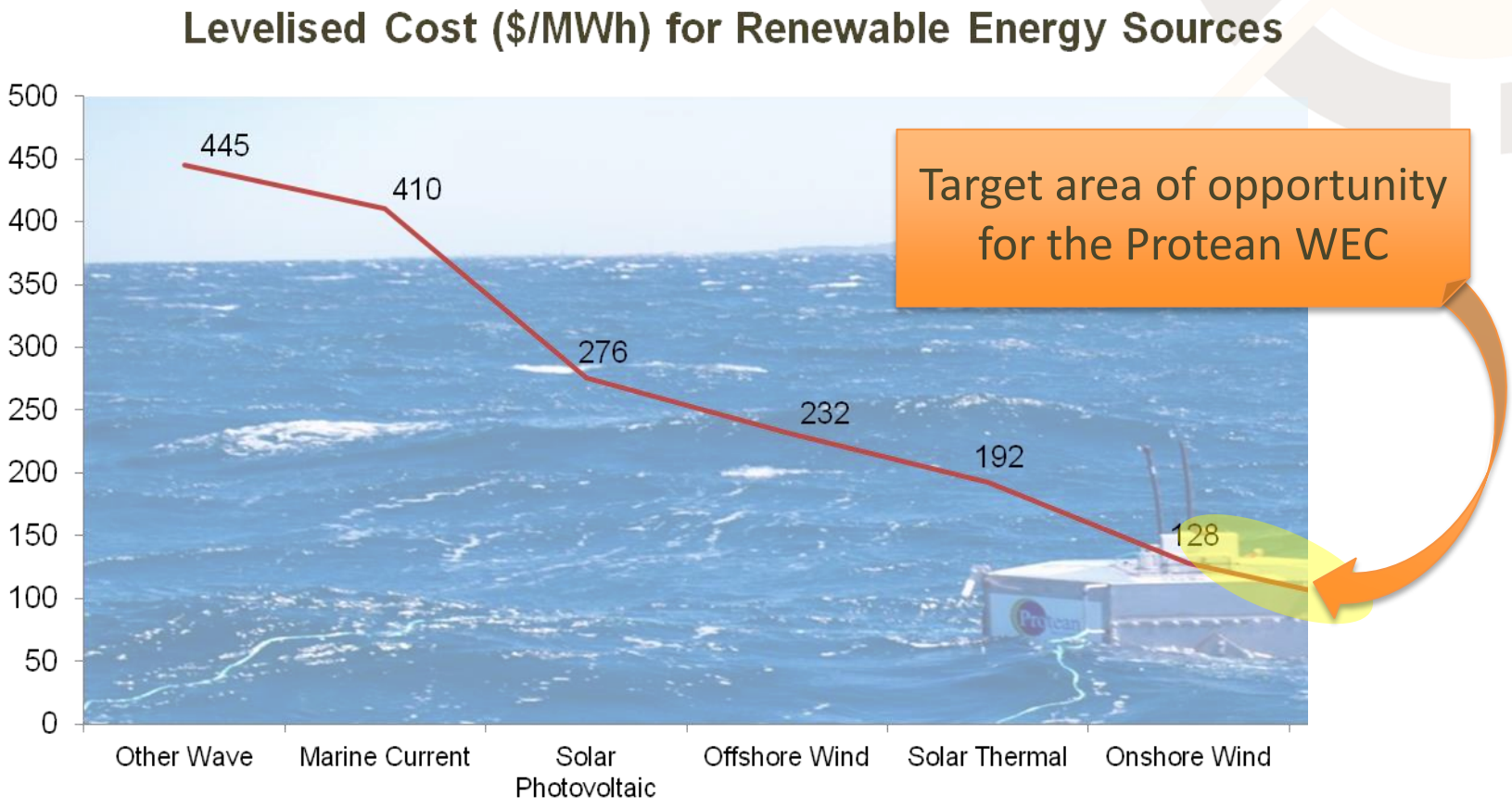
DESIGNED FOR EFFICIENCY AT SMALL & LARGE SCALE



It's in the Design

Protean's design offers numerous competitive advantages

Comparing Renewable Energy Costs



* The Company believes that these figures are indicative industry recognised values for cost per MWh for each respective renewable energy and this chart is derived from Bloomberg New Energy Finance as published by the International Energy Agency at the following web address; https://www.iea.org/media/workshops/2014/solarelectricity/BNEF2LCOEofPV.pdf

Technology Pathways



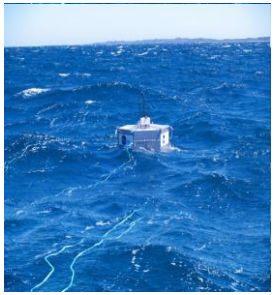
2004-2006

Initial R&D



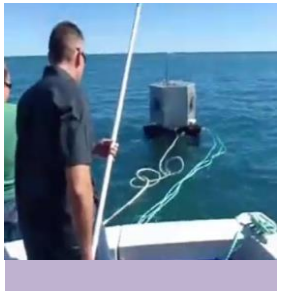
2006-2007

Desktop scale successfully tested



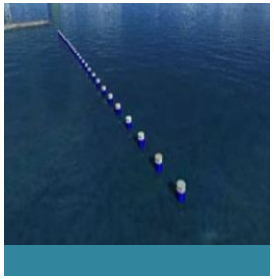
2007-2008

1.5m scale prototype designed and built



2008

1.5m scale prototyping producing Zero Emission Energy tested off the Coast of Perth WA



2010-2013

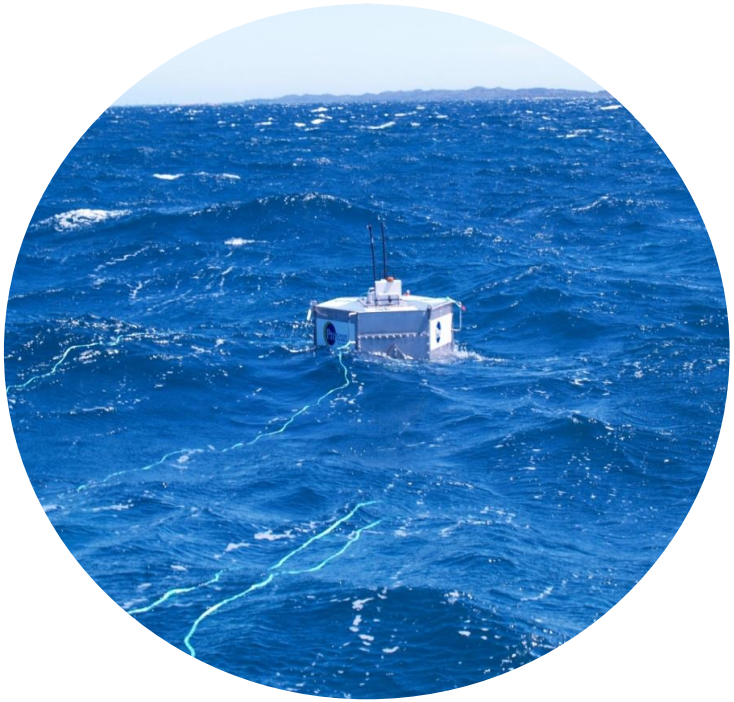
Demonstration scale and device design modelling. Forward planning for market penetration.



2014 and on

Plan and implement pilot project for testing power integration to satisfy customer needs. Prepare for commerciali sation.

Intellectual Property



1st Patent Family	2nd Patent Family	3rd Patent Family
Foundation IP	**Extensions to the Foundation IP**	**Additions to the Foundation IP**
Converts energy from 5 degrees of freedom	Converts energy from 6 degrees of freedom	Diver-less deployment & retrieval
Ability to self adjust for tidal variations	Hydrodynamic energy conversion technology	Integrated transportation
Novel Method for tuning device for max energy output		No re-engineering required for usage at any depth
Ability to tune to incoming waves to optimise energy collection		Integrated seabed mooring
Establishes the novel tension mooring system to convert wave energy		Automated deployment & retrieval technology

The Opportunity

- The potential power of waves



0	There are no wave energy companies currently operating at a commercial scale
5	The wave energy resource between Geraldton and the Southern tip of Tasmania is 5 times the present national electricity consumption
10	If just 10% of the wave energy along Australia's coast was harnessed it would be enough to meet half of our electricity needs
2050	Analysis undertaken by the Carbon Trust suggests that the deployment of wave energy worldwide could be substantial by 2050, and be equivalent to that of wind power as it is today

Transaction Details

- 24 (plus 24) month option to acquire 100% of PEA for $600k paid in 120m shares
  - 60m SHE shares at settlement & 60m SHE shares at exercise of option
  - 120m performance shares at exercise option
  - $500k minimum spend within 18 months
- SHE raises at least $1.2m via a 7 for 10 rights issue at 0.5c
- Sean Moore, Protean™ inventor, to join SHE as Chief Technology Officer for WEC

Item	Amount ($)(1)	Amount ($)(2)
Existing Project Expenditure & O'heads	$550,000	$500,000
Expenditure on Protean development (3)	$550,000	$500,000
Rights Issue Costs(4)	$125,000	$115,000
New Project Review & Administration Costs	$278,643	$95,000
Total	**$1,503,643**	**$1,210,000**

(1) Based on raising the maximum under the Rights Issue of $1,503,643 before costs

(2) Based on raising the minimum under the Rights Issue of $12m before costs

(3) This expenditure is expected to take place over a period of up to 18 months

(4) Approximate amount to conduct Rights Issue

Performance Shares Milestones

Performance Shares convert on a one to one basis into ordinary SHE shares upon achievement of any one of the following targets:

- Completion of financing of at least $5m to fund further development of the WEC Technology, in aggregate, via equity, debt, government grant, joint venture or partnership (or any combination thereof); or
- Commissioning of a WEC Technology facility of 45 kW or greater outside Australia; or
- Commissioning of a WEC Technology facility/ies of cumulative 500 kW or greater; or
- Execution of a fully funded agreement to install a WEC Technology facility or facilities of cumulative 1 Megawatt or greater on commercial terms; or
- Execution of a bona fide arm's length third party licensing, co-operation or collaboration agreement or agreements valued cumulatively at not less than A$5m[1] at the time of signing, for the whole or part of the WEC Technology for assessment, development or commercialisation.

[1] Value to be determined by an independent valuer using generally accepted valuation methodologies.

Pro-forma Capital Structure Post Transaction

Proforma Capital Structure	Shares	Options
Current balance [1]	429,612,389	1,235,883
Rights Issue (pro rata 7 for 10 at 0.5c p/share)	300,728,672	
Balance **prior to** completion of acquisition	730,341,061	
Proposed to be issued at completion of the Transaction:		
(a) Ordinary Shares (to be issued in two tranches)	120,000,000	
(b) Performance Shares [2]	120,000,000	
(c) Broker Shares	10,000,000	
Loan conversion (subject to shareholder approval) [3]	30,000,000	
Balance **after** Rights Issue & Transaction [4]	1,010,341,061	1,235,883

[1] The Company currently has 5m Class F & 7.5m Class G performance shares on issue (a total of 12.5m)

[2] Refer previous slide (23) for conversion milestones of Performance Shares

[3] $120,000 loan converts at 80% of Rights Issue price subject to Completion & shareholder approval

[4] Excluding 12.5m existing Performance Shares as detailed in note 1 above

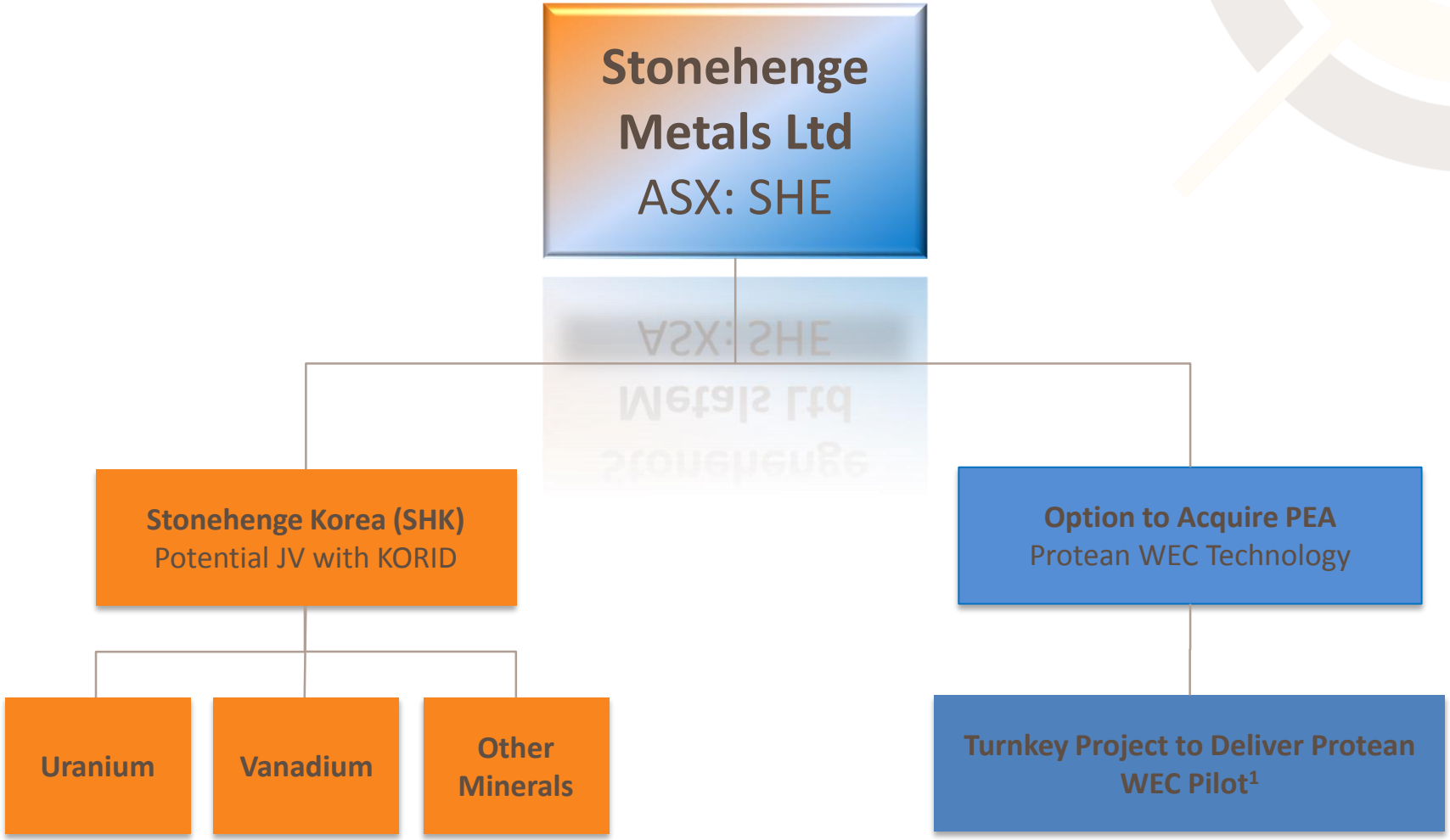
Rights Issue Timetable

Event	Date
Lodgement of Offer Document with ASIC and ASX	1 Sept 2014
Announcement of Offer and lodgement of Appendix 3B	2 Sept 2014
Notice sent to Shareholders	3 Sept 2014
Ex Date	4 Sept 2014
Rights Issue Record Date (5pm WST)	8 Sept 2014
Dispatch of Offer Document/Entitlement & Acceptance Forms	11 Sept 2014
Rights Issue opens	11 Sept 2014
Offer Closing Date*	22 Sept 2014
ASX notified of under subscriptions**	25 Sept 2014
Allotment of Rights Issue Shares & dispatch of holding statements**	29 Sept 2014

• Subject to the Listing Rules, the Directors reserve the right to extend the Closing Date for the Offer at their discretion. Should this occur, the extension will have a consequential effect on the anticipated date of issue for the New Shares.

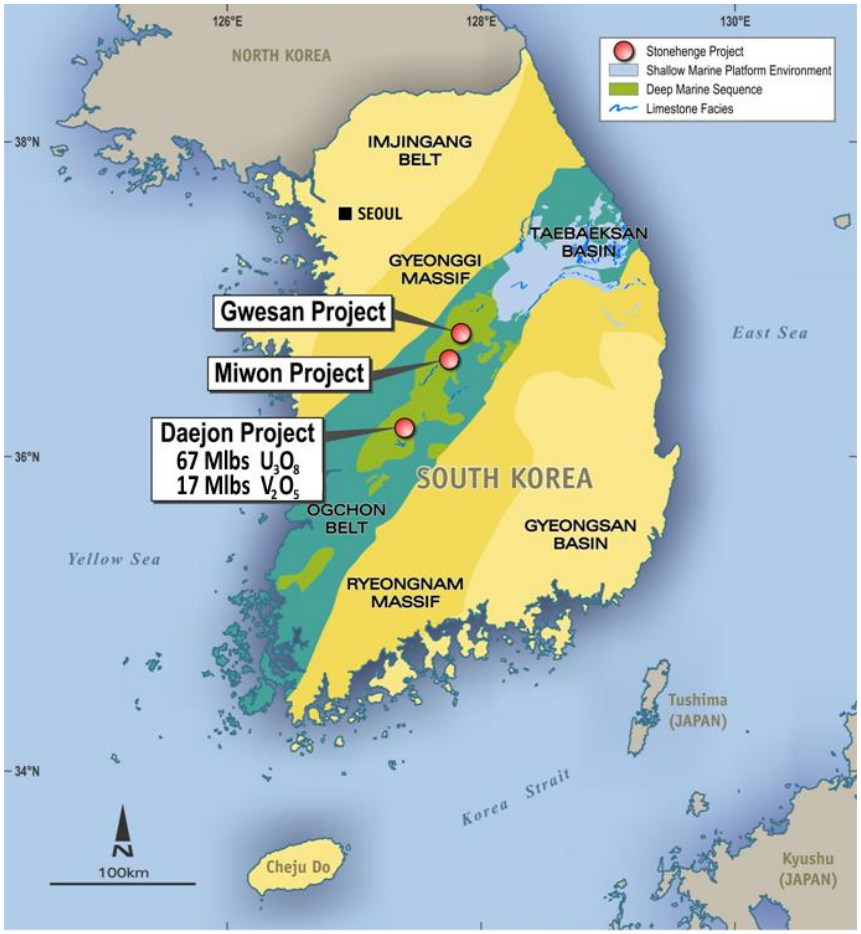
** These dates are indicative only.

Corporate Structure



[1] Fixed price pilot project delivery agreement with Moore Commerce

South Korean Vanadium and Uranium Project



- 100% ownership[1] with established Korean office and management
- Largest uranium resource in Korea with **67.0Mlbs** grading **329ppm U_3O_8** at a cut-off of **200ppm U_3O_8** (JORC [2004] compliant)
- Maiden vanadium resource of **17.3Mlbs** (95% indicated) grading **3,186ppm V_2O_5** at a cut-off of **2,000ppm V_2O_5**
- Significant uranium & vanadium exploration targets (see over)
- Predicted low processing Opex due to successful co-extraction of uranium & vanadium
- Significant potential upgrade of vanadium & uranium resources through accessing 36,000m of historical core for testing

[1] Subject to non-binding MOU with KOSDAQ listed "KORID" (Korea Resources Investment & Development Inc.)

Mineral Resources & Vanadium Exploration Target

U_3O_8 Mineral Resource Estimate at a 200 ppm U_3O_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_2O_5 Mineral Resource Estimate at a 2,000 ppm V_2O_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_2O_5 (ppm)	Contained V_2O_5 (Mlbs)
70 - 90	**2,500 - 3,500**	**385 - 695**

Uranium Exploration Target[1]		
Tonnes (Mt)	Grade U_3O_8 (ppm)	Contained U_3O_8 (Mlbs)
15 - 59	**300 - 500**	**17-39**

[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 Jul & 13 Nov 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 & 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_2O_5 & <10 ppm U_3O_8 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 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.

Objectives in South Korea

- Potential to significantly upgrade resources by testing 36,000m of core held @ KIGAM[1] – aim to define much larger vanadium resource
- Focus on moving vanadium/uranium project into development
- Targeting strategic partnerships with Korean customers
  - Nuclear power plant constructors & power generators
  - Steel makers
  - Vanadium redox battery manufacturers
- Recently entered into non-binding development MOU with KORID[2]
- Actively seeking additional partners for off take & development

[1] Korea Institute of Geoscience and Mineral Resources [2] KORID (Korea Resources Investment & Development Inc.)

Protean & Wave Energy References

- Australian Government. “Clean Energy Future.” *Renewable Energy* 2011 www.cleanenergyfuture.gov.au (accessed 21/10/2011).
- *Carbon Trust.* http://www.carbontrust.co.uk.
- Danish Energy Association. “Danish Energy Supply 09 Statistical Survey.” *Danish Energy Association.* 24 August 2010. http://www.danishenergyassociation.com (accessed October 20, 2011).
- EcoGeneration “Ocean power experts.” *EcoGeneration Magazine*, July/August 2010: http://ecogeneration.com.au.
- “Enhancing Australia's Economic Prosperity.” *Australian Government Department of Resources, Energy and Tourism.* 14 July 2011. www.ret.gov.au (accessed October 20, 2011).
- European Renewable Energy Council. “Renewable Energy Policy Review Denmark.” *European Renewable Energy Council.* March 2009. www.erec.org (accessed October 20, 2011).
- *Foreign Exchange.org.uk.* http://www.foreignexchange.org.uk/fx-rates/conversion/150/DKK/AUD (accessed 20/10/2011).
- Hemmer, M A, and A D Griffin. “The Wave Energy Resources along Australia's Southern Margin.” *Journal of Renewable and Sustainable Energy* 2, no. 043108 (2010): 2.
- Leare, David, and Miguel Estaban. “Climate Change & Renewable Energy from the Ocean & Tides: Calming the Sean of Regulatory Uncertainty.” *The International Journal of Marine and Coastal Law*, 2009: 617-651.
- Milan, Dr Laurence. “Submissions to the Senate Joint Select Comittee of Fuel and Energy.” *Parliament of Australia Senate Committees.* Carnegie Corporation Ltd. August 2008. www.aph.gov.au (accessed 21/10/2011).
- “Paperwork”, Kozumel, Creative Commons, Flickr. http://www.flickr.com/photos/kozumel/2228603119/
- Renewable Energy Policy Network for the 21st Century. *Rewewables 2011 Global Status Report.* Status Report, Milan: REN21, 2011.
- Wells, Dr Nick, and Dr Mike Shaw. *Reniew of Engineering and Specialist Support Requirement for the Ocean Energy Sector.* Review, RPS Group Plc.

Investment Risks

As with any securities investment, there are risks associated with investing in the Stonehenge Metals Limited (**Company**). Investors should be aware that an investment in the Company involves risks that may be greater than risks associated with an investment in some other companies. Accordingly, before deciding to invest in the Company, investors should consider all factors in light of their individual circumstances and seek appropriate professional advice. The Board aims to manage risk by carefully planning its activities and implementing risk control measures. Some of the risks are, however, highly unpredictable and the extent to which they can be effectively managed is limited. The brief list below outlines only some of the risks that the Company is exposed to. The list is not exhaustive. The risks associated with an investment in the Company are more comprehensively described in the prospectus that was lodged with ASX on 1 September 2014 and can be found on both the Stonehenge & ASX websites.

Specific Risks

- **Transaction and capital raising –** failure to complete the transaction with PEL and or raise the required amount of capital
- **Development and Commercialisation of IP** – failure to develop and commercialise the intellectual property
- **Intellectual Property Rights** – relating to the securing, granting and retaining of rights to the intellectual property
- **Share Market Conditions** – the company intends to list on the ASX and is exposed to share market conditions
- **Economic Conditions** –exposed to fluctuations in world wide economic and political factors in the ordinary course of business
- **Development Risk** – commercially acceptable products cannot be successfully developed and marketed
- **Supplier Risk** – third party suppliers who are to provide electronic hardware components
- **Obsolescence** – technology and products may become obsolete in the future
- **Competition** – the Company expects to experience competition from companies
- **Regulatory Risk** – regulatory approvals are required in the normal course of business
- **Reliance on Key Personnel** – reliance upon a number of Director's and key senior management
- **Financing Risks** – development and expansion of business operations depends on the ability to obtain financing
- **Additional Requirements for Capital** – the Company may require further financing in the future
- **Contractual Risks** – there is risk that counterparties will default
- **Climate Conditions** – the company is exposed to fluctuations in weather conditions and wave conditions

General Risks

- **Economic Risks** – including movements in interest rates, inflation and exchange rates
- **Operating Risks** – difficulties in commissioning and operating plant and equipment, mechanical failure and breakdown

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