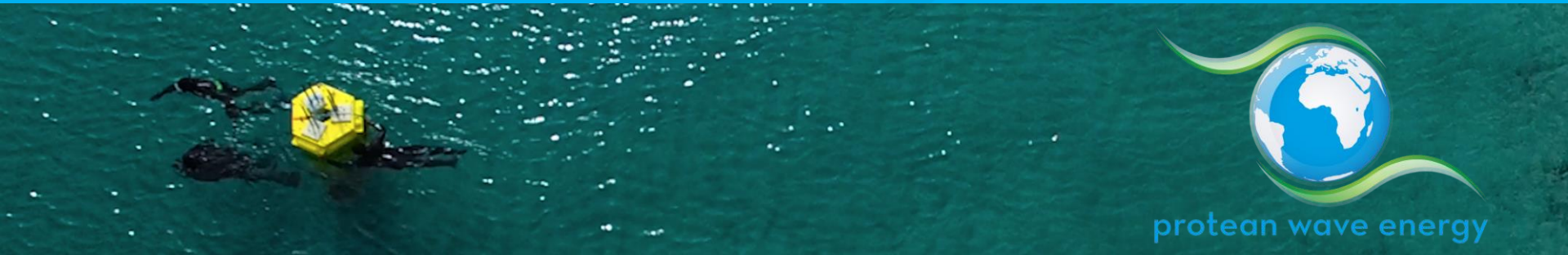




ASX:SHE



# Investor Presentation

November 2015

## Stonehenge Metals Ltd

to be renamed

## Protean Wave Energy Limited

# Disclaimer

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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 or 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.

**Recompliance with ASX Listing Rules and Name Change under Notice of Meeting:** The company dispatched a notice of meeting (NOM) to shareholders on 30 October 2015 containing amongst others, resolutions seeking approval to proceed with a change in the nature and scale of the Company and a change of name to Protean Wave Energy Limited. It is possible that shareholders may not approve these resolutions and as such the company would not therefore proceed with completion of the proposed acquisition of the Protean™ wave energy conversion technology.

**Renewable Energy Technology Development:** Any 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.

**Minerals Exploration In South Korea:** 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.

# Investment Proposition – Protean™ Wave Energy Converter

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- **Renewable energy market is a substantial and growing market** – factors driving growth include climate change forecasts.
- **Renewable energy technology with unique IP** – exclusive IP rights and patents to Protean™ Wave Energy Converter (WEC) technology in development for over 10 years.
- **Focused commercialisation strategy** – initially targeting diesel displacement for remote islands, coastal communities, ports and coastal industry.
- **Milestones**
  - ✓ recent functional ocean demonstration of single buoy to electricity completed.
  - ✓ partnership with leading U.S. University (Cal Poly) for Protean™ WEC to be part of its US Dept. of Energy funded US\$1.5m program.
  - ✓ now constructing fully funded demonstration wave farm to be deployed off the coast of Western Australia.
  - ✓ option to acquire CEM, CEM management has approval for commercial pilot wave farm in the Maldives.
- **Leadership team in place** – experience in wave energy, energy industry, ports, electric and water utilities, international business and corporate.

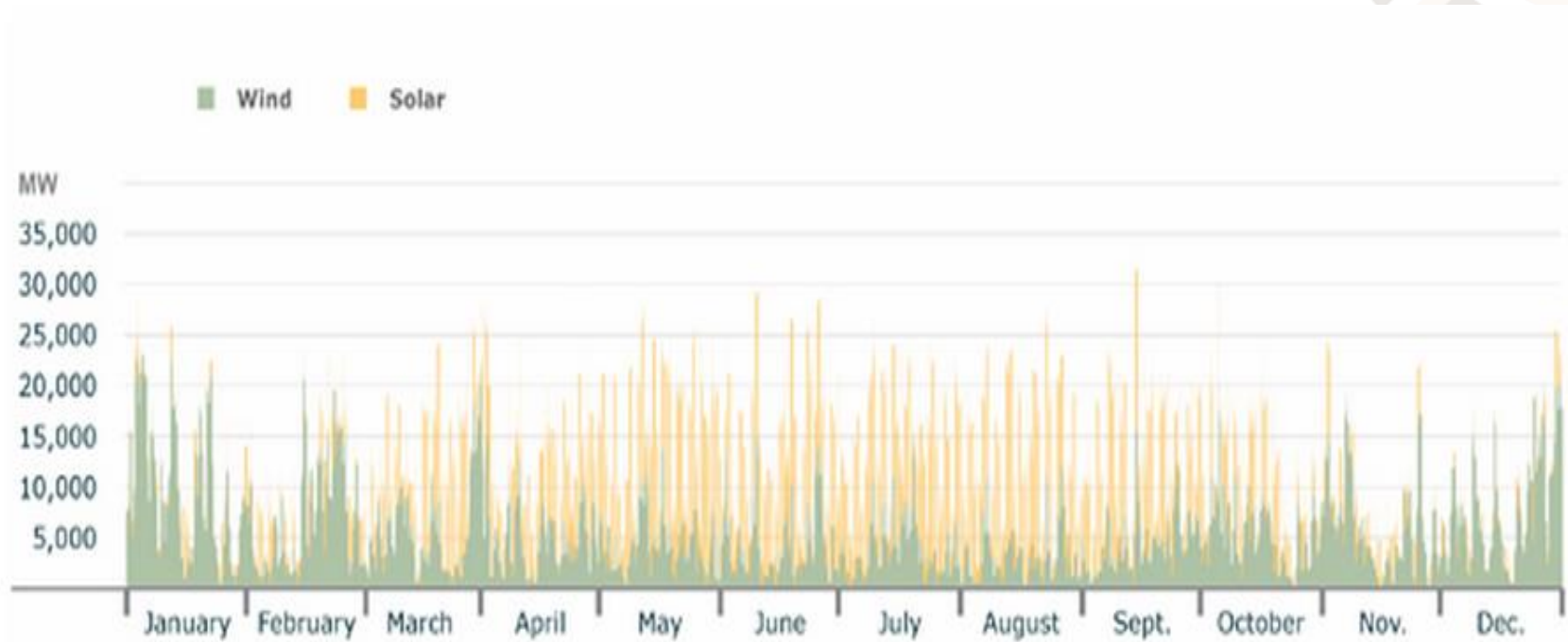
# Potential for Market Growth



**The renewable energy market is substantial and expected to grow significantly**

# Wind and Solar Resources - Intermittency

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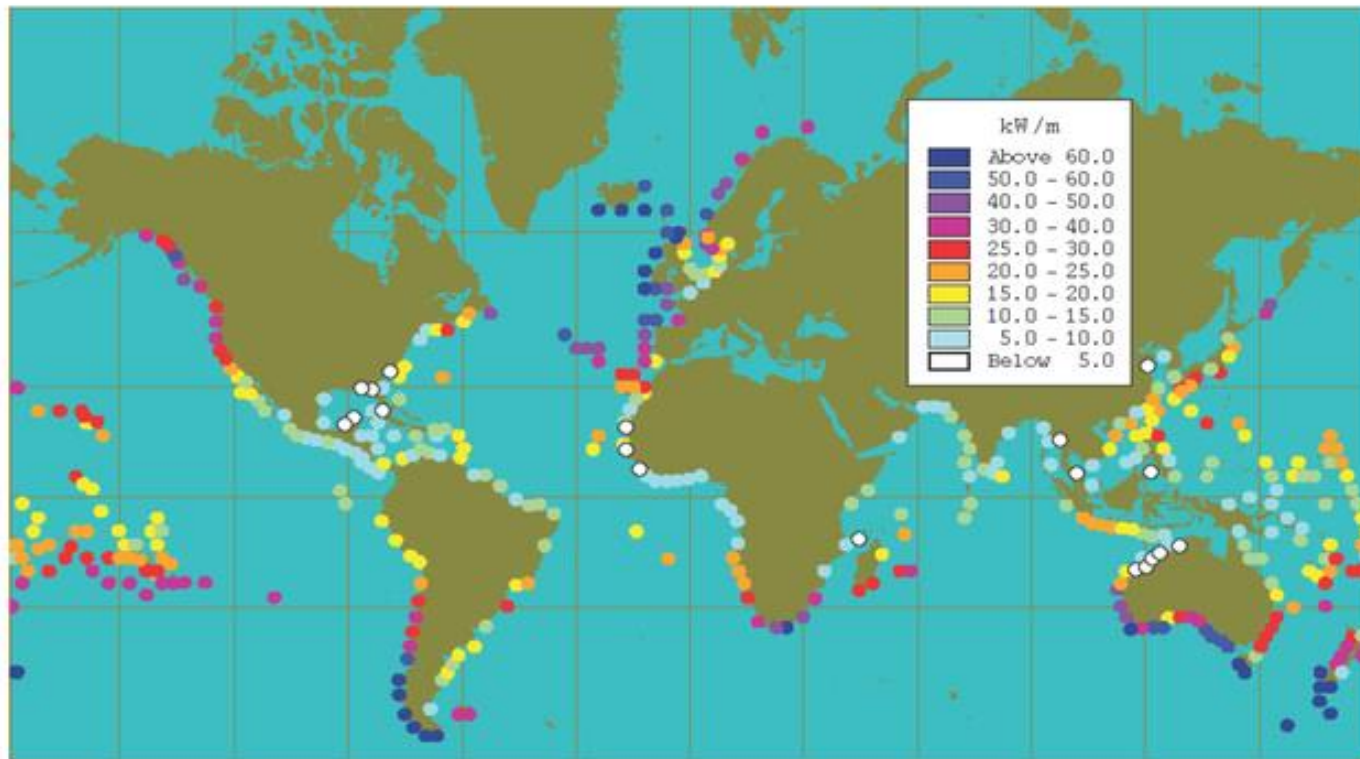


*Though Germany can count on significant generation from wind and solar most of the time, this data from 2012 shows many days in the autumn and winter when combined output falls to much lower levels. Courtesy: Fraunhofer Institute*

Source: [www.powermag.com/renewable-intermittency-is-real/?pagenum=3](http://www.powermag.com/renewable-intermittency-is-real/?pagenum=3)

# Wave Energy

## Global wave power distribution



wave power density measured in kilowatts (kW) per meter (m) of wave front for the various parts of the world

Source - The wave power density measured in kilowatts (kW) per meter (m) of wave front for the various parts of the world are provided in the graphic above (Hagerman 2004) from <http://www.geni.org/globalenergy/library/renewable-energy-resources/ocean.shtml>



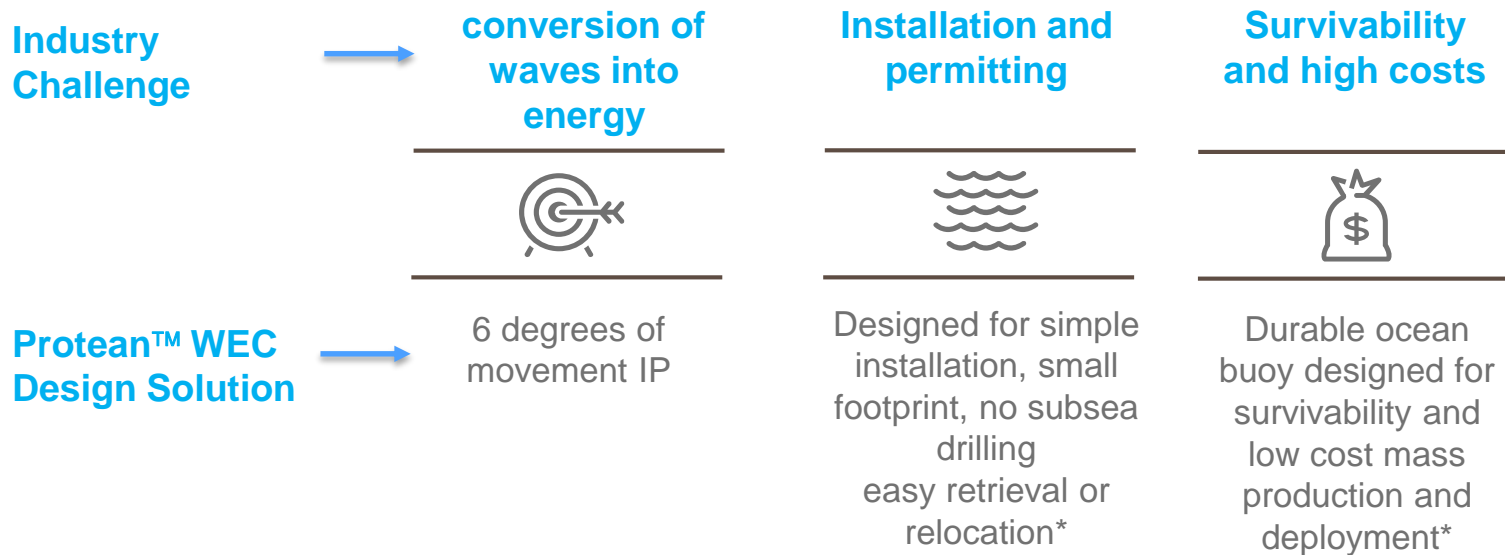
# The Protean™ Wave Energy Converter



**Wave energy has an opportunity to participate in the renewable energy market if the barriers to its adoption are removed**

# Wave Energy Industry Challenges and Protean™ Solution\*

## Targeted To Reduce Barriers to Adoption of Wave Energy\*



**JRC\*\* estimates that 45 WEC's are in advanced development globally but none have been properly commercialised to date due to the inherent challenges faced.**

\* Major design features and benefits of the design to be tested through the deployment of a demonstration wave farm and a commercial pilot project

\*\*JRC Ocean Energy Status Report, 2014





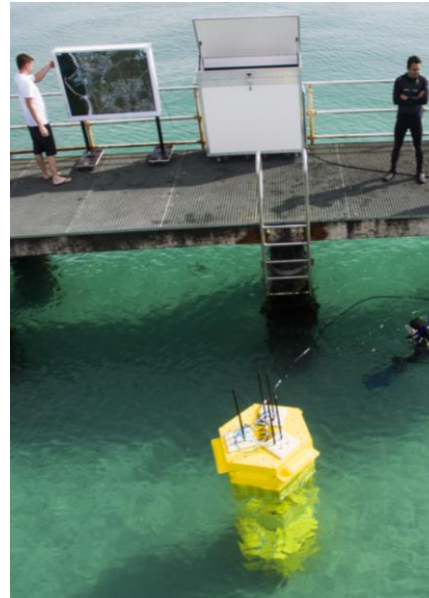
# What is the Protean™ WEC

**Patented proprietary technology**, which is designed to convert waves into energy using all six degrees of wave movement

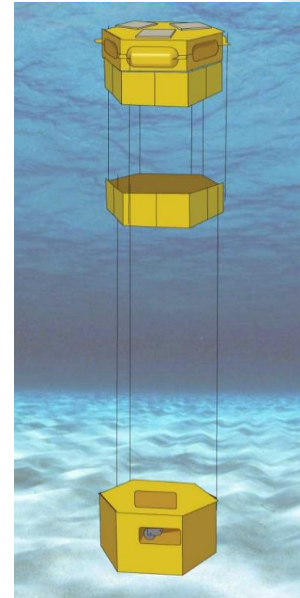
## Utilises all 6 degrees of Wave Movement

1. Up-down (heave)
2. Back-and-forth (surge)
3. Side-to side (sway)
4. Yaw
5. Pitch
6. Roll

Protean™ design uses compact architecture to target production of **power from a small device**



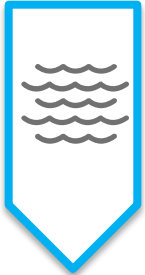
Photograph above is of the 1m demonstration device that was tested in the ocean at Coogee Beach Western Australia



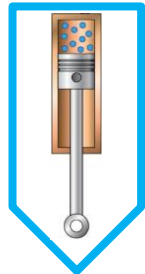
\*The image above is a stylised representation of the Protean™ WEC and does not accurately represent the actual equipment

# The Protean™ WEC Design Concept

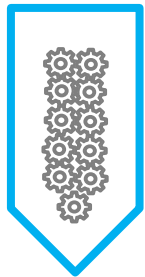
Designed to generate energy by converting wave movement into compressed air



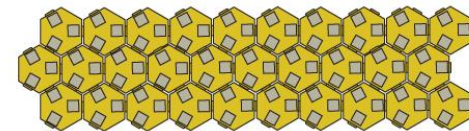
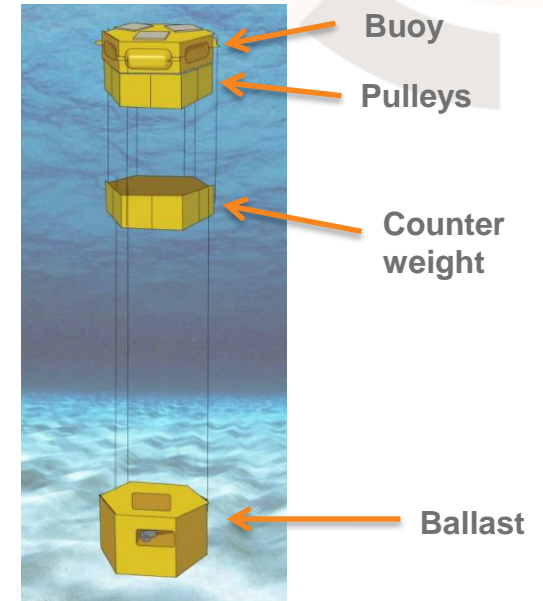
The buoy floats on the surface and all 6 degrees of motion created from waves cause the counterweights to move and the pulleys to rotate



The rotation from the pulleys creates bidirectional shaft power, which is converted into compressed air in the buoy.



Individual WEC buoys are connected together to form arrays. Multiple arrays are joined together to create a wave farm



The above images are a stylised representation of the Protean WEC and do not accurately represent the actual equipment. The demonstration wave farm will test the generation of compressed air.

# Transfer Storage & Generation System (TSG)

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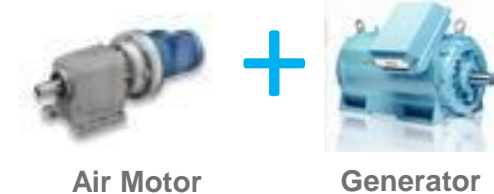
Designed to transfer and store compressed air for electricity generation



The compressed air is transported to shore via a poly pipe transfer and storage system



Air pressure drives an air motor onshore, which in turn powers a conventional electrical generator

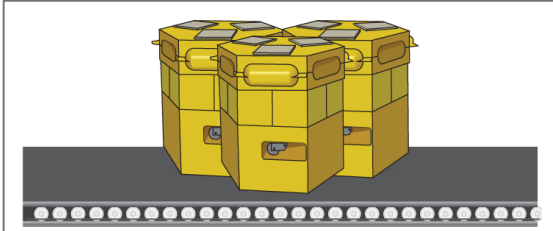


A prototype proof-of-concept system for transfer and storage of compressed air and generation of electricity from that compressed air (TSG) has been tested. The TSG will be developed to commercial pilot scale using “off the shelf components”.

# Implementation Concept

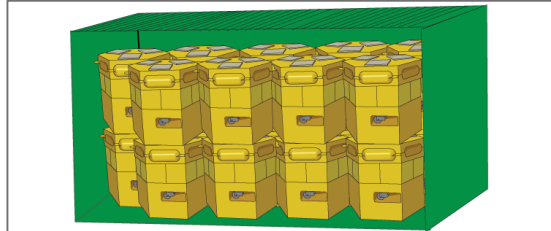
Manufacture components

1



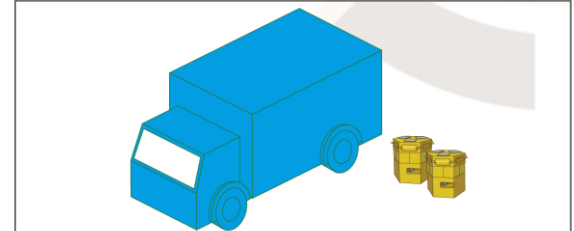
Pack in sea containers

2



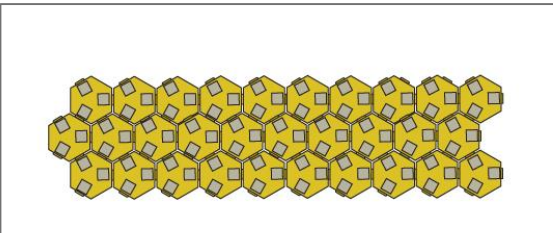
Transport – road, rail or sea

3



Assemble array in harbour

4



Tow array out to deployment site

5



Deploy devices in ocean

6



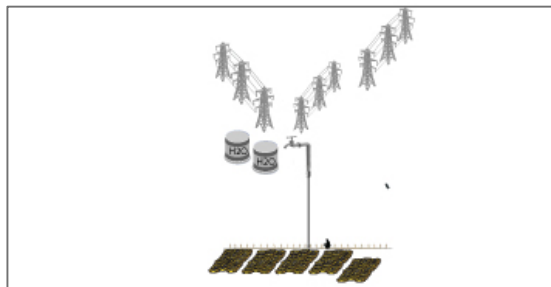
Add arrays to create “Wave Farm”

7



Connection to shore

8



Maintain – “hot swap” & tow array back to shore for refurbishment

9



\*The planned pre-commercial demonstration wave farm is targeting testing to verify core design features and benefits. This demonstration wave farm will produce compressed air. The implementation concept shown above will be tested during the planned demonstration wave farm deployment and the subsequent commercial pilot.

# Market Entry



**Focused commercialisation strategy – initially targeting diesel displacement for remote islands, coastal communities, ports and coastal industry**



# Market Opportunity – Islands and Ports

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## Remote coastal communities and islands

- World Resource Institute CAIT\* estimates there are over 60 small island nations
- The majority of their power needs are currently supplied by diesel generators
- Annual expenditure on electricity for these ~60 small island nations could be as high as A\$9 billion based on A30cents per kWh tariff\*\*

## Industrials – i.e. ports, mining and off-shore oil rigs

- Ports seeking ocean surge mitigation, breakwater protection, power and water
- 27\*\* oil rigs off the coast of California with most grid connected back to the coast. Potential for repurposing these rigs for ocean based renewable energy production

### Sources:

\* World Resource Institute CAIT - <http://cait.wri.org/>

\*\* [www.oceansciencetrust.org/wp-content/uploads/2015/04/oil-and-gas-decommissioning.pdf](http://www.oceansciencetrust.org/wp-content/uploads/2015/04/oil-and-gas-decommissioning.pdf)

\*\*\* [www.nrel.gov/](http://www.nrel.gov/)



# Advanced Progress Towards Entering Markets

## Island Nations



### Proposed Wave Farm Maldives (Hanimaadhoo Island)

- Island population of ~2,500
- Exclusive option to acquire 100% of Clean Energy Maldives (CEM)
- Management of CEM has approval and local support to facilitate a commercial WEC facility
- Expressions of interest from 100 local power users including eco resort and climate observatory

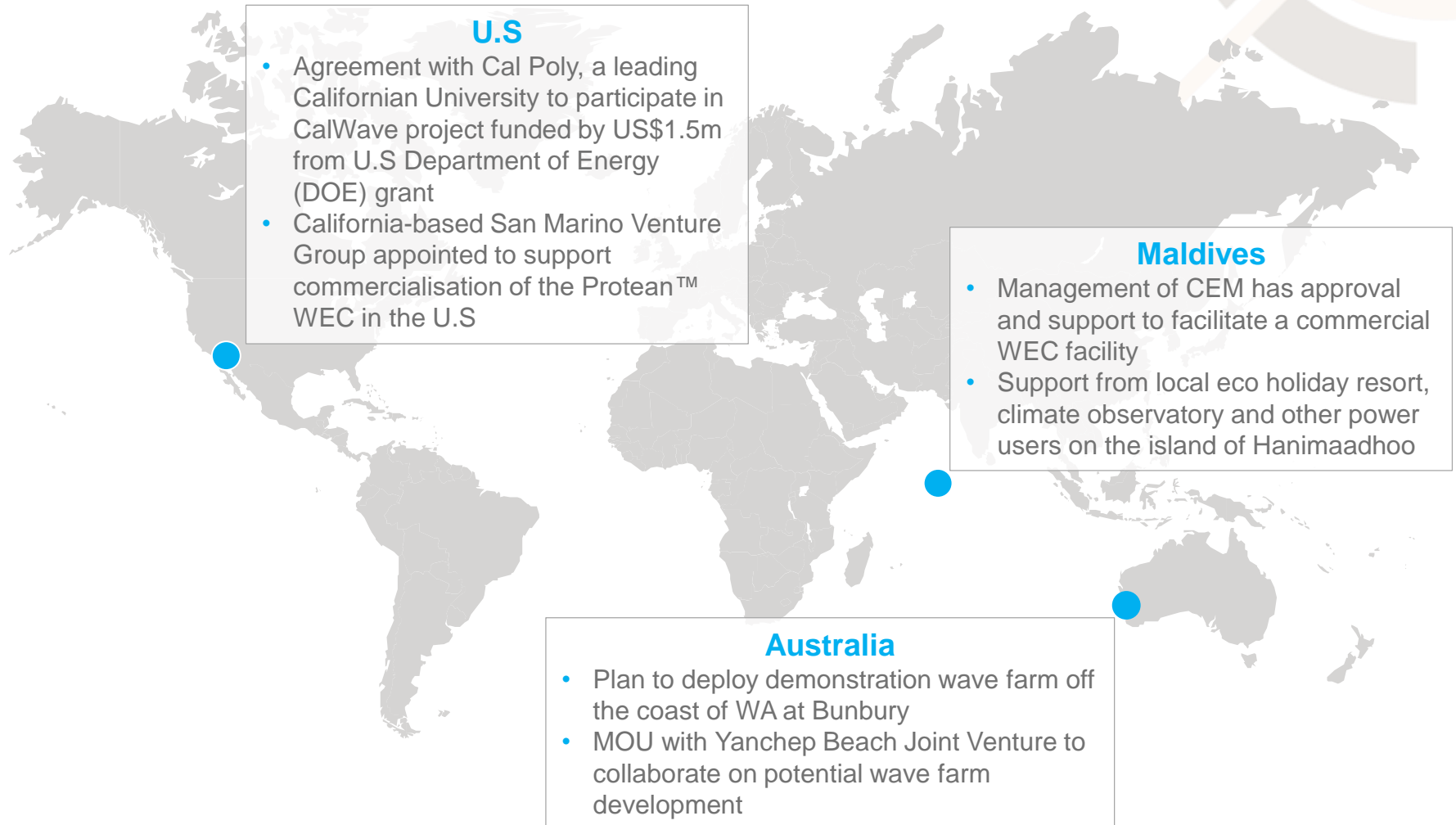
## Ports

- Plan to deploy a 30 WEC demonstration wave farm off the coast of Western Australia at Bunbury.
- This demonstration wave farm has been designed to produce compressed air.



# Key Partnerships

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# Growth Strategy

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## Scale & Commercialise



Complete feasibility study based on demonstration wave farm, conduct further testing of TSG. Commission commercial pilot scale Protean™ wave farm in Maldives

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## Expand



Expand operations around Australia and globally by targeting regional and remote islands, ports and coastal communities and industry. Generate and sell power and desalinated water to customers

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## Partner



Maximise penetration of the Protean™ WEC technology in multiple market segments and geographies with strategic alliance partners:

- Cal Poly\*
- Yanchep Beach Joint Venture (land developers)
- Microgrid design and deployment partners
- Ports
- Government and military
- Power industry companies

\* California Polytechnic University At San Luis Obispo

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# Capital Raising and Corporate Information



**Prospectus raising up to \$5 million to accelerate the  
Protean™ WEC towards commercialisation**

# Stonehenge Transitioning To Renewable Energy

- Stonehenge exercised option to acquire 100% of Protean Energy Australia Pty Ltd, (PEA)
- PEA owns the intellectual property rights to the Protean™ Wave Energy Converter (WEC)
- Notice of meeting dispatched for shareholders to approve:
  - completion of acquisition;
  - change in nature and scale;
  - change name to Protean Wave Energy Limited; and
  - Prospectus raising up to \$5 million to accelerate the commercialisation of the Protean™ WEC

Pro Forma Ordinary Shares on Issue Post Reconciliation	Number of Shares	%
Existing Shareholders	861,353,928	74.28%
Shares issued to Vendor <sup>(1)</sup>	60,000,000	5.17%
Shares issued to Loan Holders and Placement Offerees	38,261,352	3.30%
Shares issued under the Prospectus Raising <sup>(2)</sup>	200,000,000	17.25%
Total <sup>(3)(4)</sup>	1,159,615,280	100.00%

1. Does not include 120m performance shares issued to the Vendor's nominees
2. Assumes the oversubscription of \$5 million is raised under the Prospectus at \$0.025 per Share
3. Assumes all offerees take up their respective Offers under the Prospectus
4. If all options are exercised and all performance milestones are met a total of 648,886,353 additional shares could be issued

# Board and Management

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**Mr Brendan Hammond**  
Non-Executive Chairman

Former Chairman of Horizon Power, WA Watercorp and Dampier Port Authority Boards. Currently Chairman of Centric Digital International Ltd and Professor Adj. of Sustainability at Curtin University, WA. 24 years+ resources experience. Managing Director at Rio Tinto's Argyle Diamonds. Led turnaround to create a highly profitable business.

**Mr Bruce Lane**  
Managing Director

Operational, management and corporate experience within listed companies. Experience with early stage technology and minerals exploration companies. 13+ years of international management experience with international "blue chip" companies. Sloan Fellow at London Business School.

**Sean Moore**  
Chief Technology Officer  
(Inventor of Protean™ WEC)

An engineer and scientist, and inventor of the Protean™ wave energy converter technology. Recipient of many awards and scholarships and recognised for his expertise in ocean energy. Panellist on the highly popular Ocean Energy Panel at the inaugural 2009 Asia Pacific Clean Energy Summit in Hawaii.

**Mr William (Bill) Toman**  
President of US Subsidiary

Developed over 2,000 MW of generating capacity in the USA & overseas. Led U.S. Department of Energy (DOE) funded study. Led development of the U.S.'s first open ocean, grid-connected wave energy testing & demonstration facility (Humboldt WaveConnect, a 5 MW project). Nuclear Power Engineer.

**Mr Scott Davis**  
General Manager Business  
Development

20+ years' experience across the Electricity and Resource sectors in Australia, Canada and the Solomon Islands. Led introduction of a location based renewable energy buyback tariff for Regional Western Australia together with the introduction of generation management requirements for solar – a first for Australia.

**Mr Young Yu**  
Director

Extensive private and public sector experience in finance, consulting, trade and international business in both Australia and Korea. Trade Commissioner to the Australian Trade Commission within the Australian Embassy in Seoul, Korea and was the Regional Director/Representative for the Western Australian Trade and Investment Office in Seoul, Korea.

**Mr Bevan Tarratt**  
Non-Executive Director

Extensive background in the accounting and financial services industries. Director of a number of ASX listed companies. He has a breadth of corporate experience with a deep understanding of capital markets and international taxation.



# Milestones and Development Pathway

Prior to Stonehenge Option Period	During Stonehenge Option Period	After Acquisition Completion & Readmission to ASX
<ul style="list-style-type: none"> <li>• Initial R&amp;D</li> <li>• Desktop scale successfully tested</li> <li>• First IP Registration 2007</li> <li>• 1.5m scale prototype designed and built</li> <li>• 1.5m scale prototyping producing Zero Emission Energy tested off the Coast of Perth WA</li> <li>• Plan and implement pilot project for testing array and power integration</li> </ul>	<ul style="list-style-type: none"> <li>• Demonstration scale and device design modelling for updated design</li> <li>• Completion of design and fabrication of test buoy</li> <li>• Workshop testing completed</li> <li>• Initial functional ocean testing of single 1m WEC and prototype of transfer, storage &amp; generation system (TSG)</li> <li>• Bill Toman &amp; San Marino Venture Group engaged in the U.S</li> <li>• Exercised option to acquire Protean™ technology</li> <li>• Entered into Option Agreement with CEM for commercial pilot wave farm in Maldives</li> <li>• Commenced build of 30 buoys to create demonstration wave farm. Project fully funded and fabrication in progress</li> <li>• Established new team with leading industry expertise</li> <li>• Strategic partnership with Cal Poly and US DOE funded CalWave<sup>sm</sup> Project</li> </ul>	<ul style="list-style-type: none"> <li>• Completion of build of 30 buoys to be used in demonstration wave farm</li> <li>• Deploy and test demonstration wave farm off WA coast at Bunbury</li> <li>• Further development of TSG</li> <li>• Feasibility study for first commercial deployment</li> <li>• Independent review of wave farm data and feasibility study</li> <li>• Potential exercise of CEM Option Agreement for commercial pilot wave farm in Maldives</li> <li>• Seek customer and partner agreements</li> </ul>
<p>From 2004 – October 2014</p>	<p>From November 2014 – December 2015</p>	<p>From January 2015</p>

# Contacts

# Indicative Timetable

## Bruce Lane – Managing Director

Telephone: + 61 8 9481 2276

## Office Address

Level 3

89 St Georges Terrace

Perth, WA, 6000

Telephone: +61 8 9481 2277

Fax: +61 8 9481 2355

Event	Date
Lodgement of Prospectus	w/c 16 Nov 2015
Offer Opens	w/c 23 Nov 2015
Shareholder meeting to approve Acquisition and Securities suspended from trading	30 Nov 2015
Record Date for Shareholder Priority Offer	30 Nov 2015
Offer Close	18 Dec 2015
Allotment of New Shares	w/c 21 Dec 2015
Re-admission to the Official List	January 2016

The above dates are indicative only & are subject to change.  
The Directors reserve the right to amend this timetable

Postal address: PO Box 7631, Cloisters Square, Perth 6850

[Email: admin@stonehengemetals.com.au](mailto:admin@stonehengemetals.com.au)

[www.stonehengemetals.com.au](http://www.stonehengemetals.com.au) | [www.proteanwaveenergy.com](http://www.proteanwaveenergy.com)