Wave Swell Energy Limited

Information Memorandum

July 2019

ACN 615 293 724

Contents

1 Important Notice

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Risks

The business of Wave Swell Energy is exposed to certain risks as further described in Key Risks.

Copyright

2 A Note from the CEO

Dear Potential Wave Swell Investor,

Thank you for your interest in Wave Swell Energy and the emerging ocean renewable energy sector.

Back when I was doing my PhD in Oceanography, I decided I wanted to do something very practical with my knowledge. One day, as part of my research, I calculated the amount of energy in all the waves washing up on the beaches of the world each year. It was more than twice the energy used annually by the whole of humankind. At that moment I realised what I needed to do was to develop a cost-effective technology to convert the energy in ocean waves into electricity.

Fast forward to 2019 and the result is Wave Swell Energy, a company on the cusp of making wave energy a truly commercial reality. The technology works on a very simple principle that is found in nature – the blowhole. The waves cause the water level inside an artificial version of a blowhole to rise and fall, driving an air turbine that generates electricity. It actually works more like a short and squat offshore wind turbine than a traditional wave energy device.

Anyone who has been dumped by a wave at the beach will know just how much power there is in the ocean. This is the same power that Wave Swell can now harness. It's free, sustainable, and almost limitless green energy, there for the taking. I hope you choose to be a part of this exciting journey by investing in Wave Swell Energy and helping us progress the energy industry into the 21st century. Join us and be part of the renewable wave of the future.

Dr Tom Denniss

CEO, Inventor, and Co-Founder

Wave Swell Energy Ltd

3 Wave Swell Energy

3.1 Company details

This Information Memorandum is provided by Wave Swell Energy Limited ACN 615 293 724, trading as Wave Swell Energy.

Wave Swell Energy was incorporated on 12th October 2016 in Victoria as a public company limited by shares.

Its registered office and contact details are care of Accru Melbourne Pty Ltd, 50 Camberwell Road, Hawthorn East VIC 3123 and its principal place of business is 50 Camberwell Road, Hawthorn East VIC 3123.

3.2 Description of the Business

3.2.1 Overview

The Wave Swell Energy technology generates electricity using a wave energy converter conceived by CEO, Tom Denniss. The core product, called the UniWave™, is an elegant and low-cost solution for generating electricity from ocean waves. It is highly efficient, has minimal effect on marine life, and has a relatively simple design.

The world is moving toward a sustainable energy future. Wave energy comprises a key component of this trend. With its greater reliability and predictability than solar or wind, waves can help balance the supply of energy from variable renewable sources.

There is more than enough wave energy on Earth to supply all humankind's current energy needs. Australia has an excellent wave climate – one of the best in the world. The CSIRO estimates there is enough wave energy along just the southern coast of Australia to power the whole country more than five times over[1]. Clearly, this is an energy resource we should be looking to capture.

Wave Swell Energy's technology is very highly regarded. The Wave Swell Energy technology is a significant improvement over previous wave energy technologies in terms of its conversion efficiency and cost effectiveness. Wave Swell Energy believes it will be one of the lowest cost forms of energy generation in the world within the coming years.

Wave Swell Energy is intending to license its technology to energy generators and retailers across the planet, both private and government to receive royalties and/or a carried interest in projects employing the Wave Swell Energy technology. This business model is designed to earn recurring revenue that will continue to build as more of the technology is installed globally without the need for Wave Swell Energy to raise substantial amounts of capital.

[1] *CSIRO – Ocean Renewable Energy 2015-2050: An Analysis of Ocean Energy in Australia – July 2012*

3.2.2 The Need for Renewable Energy

It is vital the world moves quickly toward a renewable energy future.

Prior to the Industrial Revolution, most energy was derived from sustainable sources. Then fossil fuels were discovered and over the past centuries more than 80% of our energy has been generated by burning carbon-based lifeforms that took millions of years to degenerate into coal, oil, and gas (in 2014 this percentage was 81.1%[2]).

Despite a drop in global coal consumption over the past few years, the world still burned more than four billion tonnes of coal in 2017[3]. Oil consumption was of a similar magnitude.

The burning of these fossil fuel sources is, of course, detrimental to the environment. But they are also limited in the long term. Eventually these sources will run out. They will have to be replaced by sustainable energy, such as that found in ocean waves. The Kyoto Protocol and Paris Agreement are examples of how the world has come to a global consensus on this need to migrate to a renewable energy future.

This revolution is well under way, particularly with the uptake of solar and wind energy. However, renewable energy as a global solution works best when it's derived from a diverse range of sources. When the wind isn't blowing, and the sun isn't shining, electricity has to be produced from something else. Waves are a perfect complement to the variability of these other sources, improving reliability and strengthening the wider electricity grid.

In fact, wave energy has a specific advantage over both wind and solar energy. Natural phenomena like rapid wind speed variations due to gusts and clouds suddenly obscuring the sun lead to complications with electricity grids. Wave energy's much greater predictability, which can be accurately estimated many days ahead, greatly improves the reliability of delivering electricity from

[2] *Experience Curves for Energy Technology Policy – International Energy Agency, 2000*
[3] *BP Statistical Review of World Energy 2018*

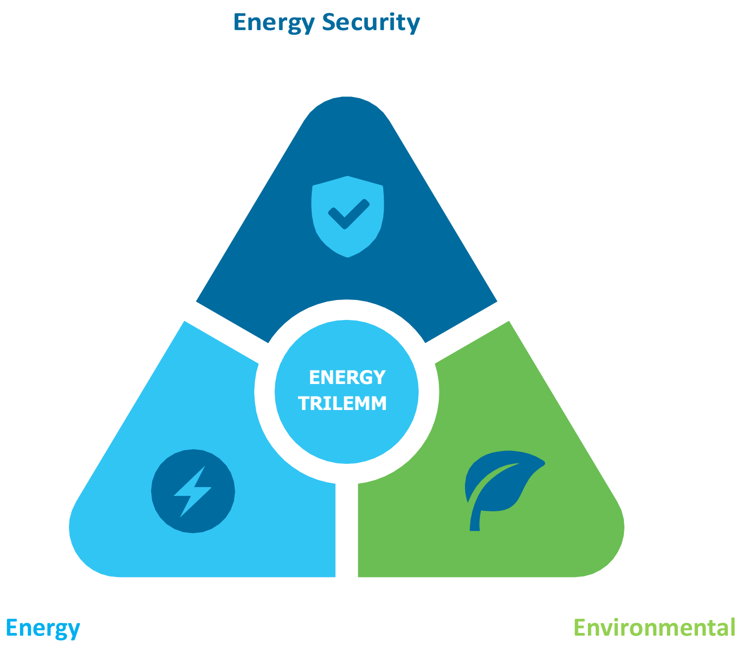
renewable sources.

In addition, wave energy is less variable than other renewable sources. This combination of the higher reliability and lower variability means wave energy is considered complementary baseload – put simply, it's better at providing power when it's needed.

3.2.3 The Energy Trilemma

The "Energy Trilemma" is an idea used by energy industry participants and is a useful way of looking at energy sources to determine if they are truly sustainable. The Energy Trilemma assesses energy sources, or combinations of energy sources, against three categories of critical obstacles to sustainability. For energy sources to be truly sustainable, they must rate strongly in each of these categories:

- **Environmental Sustainability:** Energy source must be highly abundant, with low or insignificant risk of depletion, and minimises any negative direct or indirect effects on the environment at large.
- **Energy Security:** Effective management of primary energy supply from domestic and external sources, reliability of energy infrastructure, and ability of energy providers to meet current and future demand.
- **Energy Affordability:** Accessibility and affordability of energy supply across the population.



For example, while coal fired power stations can deliver electricity constantly (Security) and at a fairly low cost (Affordability), they do not satisfy the Environmental Sustainability requirement.

Wind and solar energy generation ranks highly for Environmental Sustainability and they have both also made strong advances in affordability with costs now a fraction of those in earlier years. However, because electricity needs to either be used or stored at the time it is generated, and because gusts and clouds cause electricity production to fluctuate, wind and solar have struggled with Energy Security. With the recent more widespread adoption of battery and pumped hydro storage the situation has improved, but it comes at an extra cost because the cost of that electricity now has to be evaluated not just against the wind turbine or solar farm, but also against the cost of the battery or pumped hydro facility. In general, most of the electricity is still used at essentially the same time as it is produced.

Wave Swell Energy's UniWave™ device can satisfy all three corners of the Energy Trilemma:

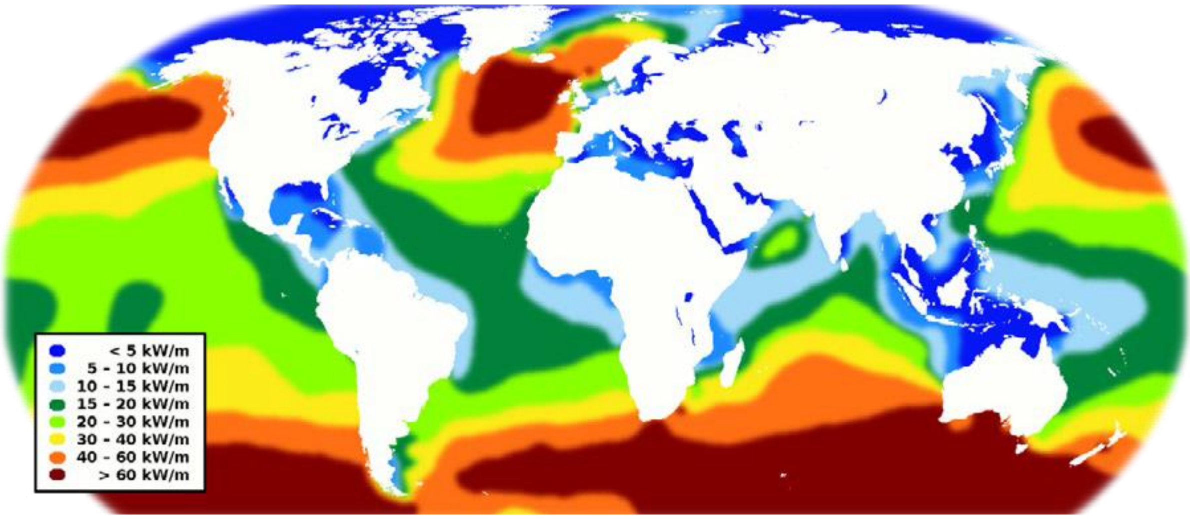
- powered by a green, naturally abundant energy resource;
- provides a vast improvement in predictability when compared to wind or solar, as well as much needed diversification and decentralisation from the existing green energy supply mix; and
- costs are projected to be competitive with, and in many cases better than, wind and solar, despite their advanced technological stage.

3.2.4 Wave Energy and the Renewables Supply Mix

Ocean waves contain enormous energy. If you've been dumped by a wave at the beach, you'll know this already. An average wave on Australia's southern coasts contains about 50 kW per metre of wave crest. Compare this to the amount of power a typical Australian household uses on average, which is about 0.8 kW[4]4. That's the power requirements of more than 60 households in just one metre of wave crest. Or 60,000 households from just 1km of wave front. Waves are a much more concentrated form of energy than wind or solar.

The highest energy locations for wave energy are Australia, Western Europe, and North and South America as seen in the map below. Australia's wave climate is ideal for the implementation of industrial-scale wave energy convertor infrastructure. In South Australia and Tasmania in particular, only a fraction of the wave energy present year-round would be needed to fulfil 100% of those states' electricity needs.

Global average annual wave power (kW/m)[5]



[4] https://www.ovoenergy.com/guides/energy-guides/how-much-electricity-does-a-home-use.html
[5] http://albatern.co.uk/wave-energy/

2017 Average Electricity[6][1]

STATE	PRODUCED (GWh/day)	POTENTIAL COASTAL WAVE ENERGY (GWh/day)
New South Wales	176	241
Victoria	127	288
Queensland	163	479
Tasmania	27	1,296
South Australia	30	1,729
Western Australia	NA	3,384

Outside of Australia, many global locations, particularly those with large coastal populations and energetic wave climates, would reap significant benefits (lowest costs, greater consistency, greater energy security) from including wave energy capture in their energy supply mix.

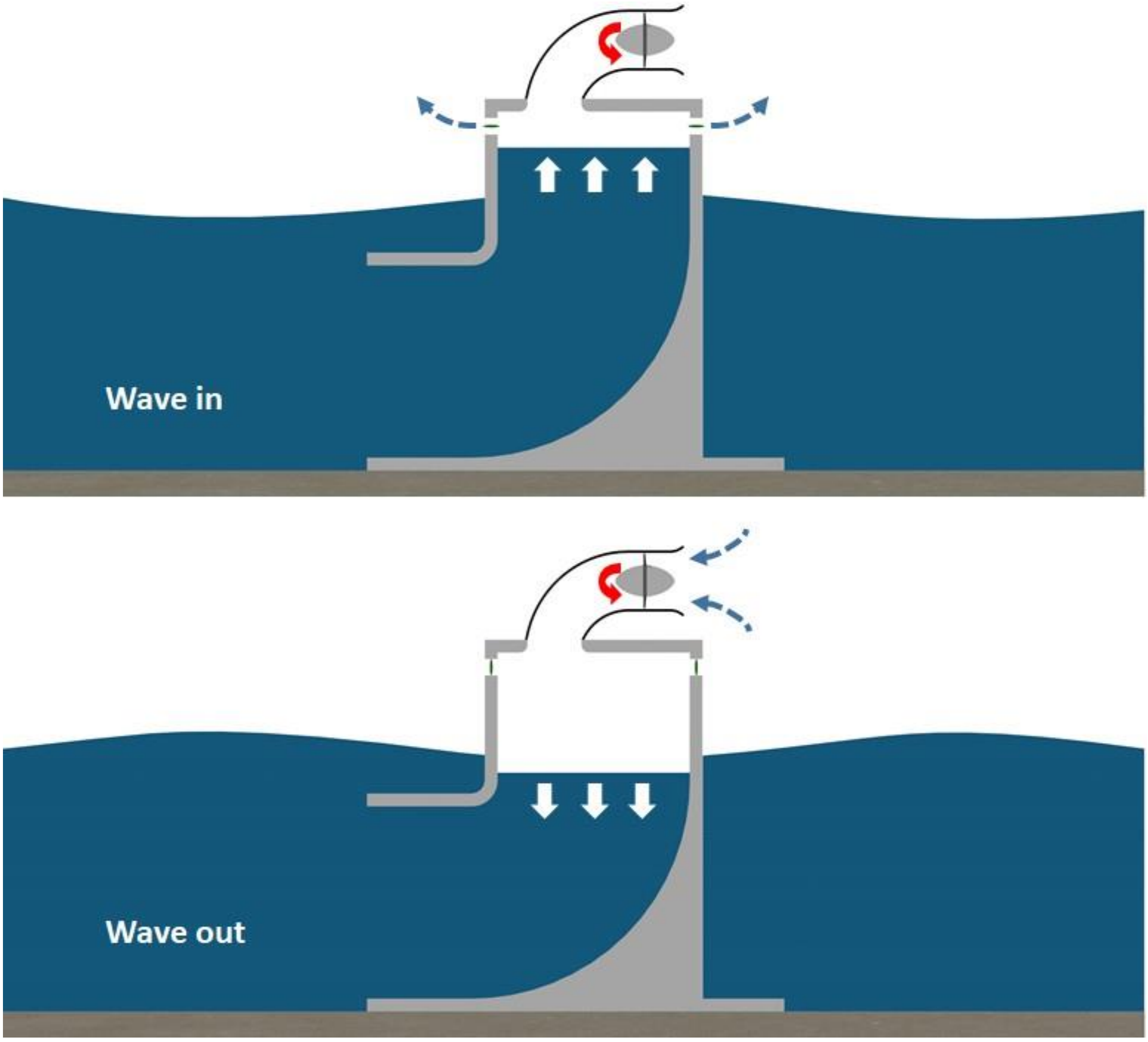
The future of the global energy mix will not rely on any one source. Energy security will depend on accessing a diversity of sources of renewables from a myriad of different locations. Relying on large centralised generation leaves the world at the mercy of disasters, both natural (e.g. earthquakes) and man-made (e.g. terrorism). Spreading out the supply of power across a diverse range of geographical sites will improve both the security and stability of electricity generation.

Wave energy will form an important part of this diverse energy mix. There are many regions in the world where waves represent the best source of energy. In other locations, it will be wind that is the logical choice. In others it will be solar. Ultimately, it will be a case of "horses for courses", with the cheapest and most abundant form of energy in any given location providing the bulk of that region's energy requirements.

3.2.5 Technology Overview

The Wave Swell Energy technology is relatively simple. As waves pass the large blow hole-type chamber the water level inside rises, pushing out the air inside the chamber through special valves. As the waves then start to fall the water level inside the chamber also falls. The low pressure within the chamber causes air to be sucked into the chamber through a turbine that spins in a single direction. This turbine is connected to a generator that converts this energy into power that is transmitted back to shore.

[6] *CSIRO – Ocean Renewable Energy 2015-2050: An Analysis of Ocean Energy in Australia – July 2012*

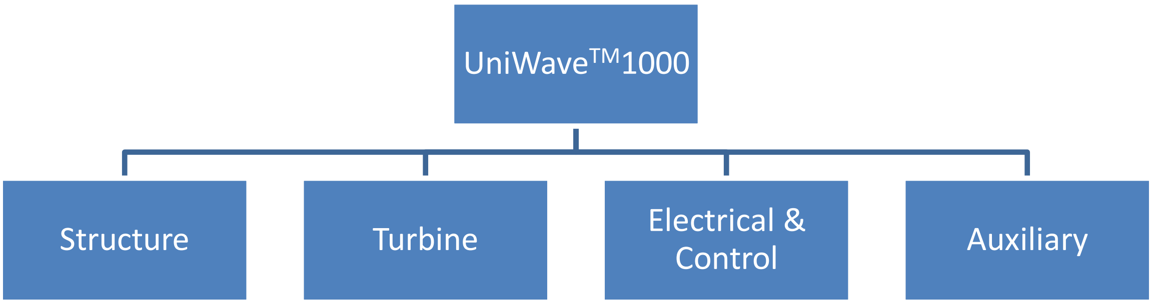


Somewhat counterintuitively, the WSE unidirectional system produces more energy on its single downstroke than the sum of the up and downstrokes of a bidirectional system. Detailed investigation into this phenomenon has revealed the reason. When energy enters a bidirectional Oscillating Water Column (OWC) via the rising water column, the compressed air above 'pushes back' on the water column, inhibiting its rise. This pushback propagates through the column. It has the effect of reducing the amount of energy entering the system compared to when the air above has not been compressed.

By venting the air to the atmosphere on the upstroke, the Wave Swell Energy system allows all the energy that would naturally flow into the chamber to do so, thereby capturing more energy in the system for conversion on the downstroke.

The Wave Swell Energy technology is mechanically simple and has no moving parts below the waterline. This means that access to the equipment is simple, maintenance costs are low and, most importantly, the impact on the surrounding ecosystem is minimised.

A standard 1MW UniWave™ is comprised of the following four main systems



The standard UniWave™ will be a 1MW unit that is essentially comprised of four parts:

1. Structure - The gravity based concrete structure sits on the seabed under its own weight. The structure is predominantly the oscillating water column plus some additional elements for housing the turbine, electrical equipment, flotations chambers and foundation base slab.
2. Turbine - The turbine rotates at between 500 – 1000 rpm, removing the need for a gear box, with the turbine directly connected to a generator. The turbine is mounted inside a cowling to smooth the airflow and reduce the aerodynamic losses. The average turbine efficiency over a wave cycle is 75%. The turbine is mounted on top of the UniWave™ structure, out of reach of waves. Other than potential sea spray, water never comes into contact with the turbine.
3. Electrical - The electrical infrastructure is comprised of three main subsystems
    a. Generator – A squirrel cage electric generator is directly coupled to the turbine. The generator is controlled by a variable speed drive.
    b. Transmission - The transmission subsystem takes the power generated at 690V, elevates the voltage to 11kV via an onboard transformer, transmits it to shore and connects to the local grid.
    c. Control - The Control System is the central system that controls and operates the turbine, provides remote access to the onboard systems and autonomous operational control. It is powered by a DC (direct current) UPS (uninterrupted power system) and includes an appropriate PLC (programme logic controller). All monitoring and instrumentation will be fed back into the control system.
4. Auxiliary – This includes the valves and turbine shut off door.

The UniWave1000™ has the following features:

- It is standardised at a rating of 1 MW, equal to the average power usage of 1,000 homes.
- It has a capacity factor of approximately 45% (wind is more like 30% and solar approximately 25%);
- The realised practical turbine efficiency is 75% (wind turbines have turbine efficiency of approximately 30%);
- The UniWave1000™ weighs approximately 4,500 tonnes, being substantially constructed of concrete that is manufactured proximate to the location for deployment. The unit sits on the sea bed in a water depth of approximately 10 metres. Only concrete is in contact with the water;
- The turbine and generator are located within the concrete structure of the UniWave1000™ about 8 metres above the water line, and out of reach of waves. The equipment located at the

back of the structure is protected from any possible wave impact.

- The concrete form of the structure is quite squat, enhancing its survivability in the ocean.
- There is no impact on the marine environment because only the inert concrete structure is in contact with water. Marine creatures actually treat OWCs (oscillating water columns) like an artificial reef, congregating around the structure. Fortunately, the presence of marine life in close proximity to the device has no impact on its performance, or on its structural integrity. WSE units and sea life happily coexist in harmony with one another.

The UniWave200™ is approximately 13 X 18 metres by 14 metres tall, albeit partly submerged in 6 metres of water. This commercial demonstration unit will be located approximately 150 metres from the coastline near Grassy Harbour on King Island, ensuring minimal visual and sound impact.

Comparative view of a WSE unit, with other structures typically seen in the ocean

UniWave™ structures have much more in common with offshore wind turbines than with the majority of other wave energy technologies. Both the UniWave™ and offshore wind turbines:

- are reliant on the flow of air past the blades of a turbine to turn the turbine to generate electricity;
- have essentially one moving part - a turbine located well above the water line.

A wind turbine, however:

- is subject to the wind changing direction;
- spins at a low speed and so requires a gear box (the friction of which absorbs energy that could otherwise be used to generate electricity) to translate the slow rotation into rotation of the generator at the speed required for the production of electricity;
- can stall in low wind speeds;
- is expensive to locate as its high overturning moment requires it to be fixed deep in the sea bed; and
- much of the air approaching the turbine blades flows around the blades.

In contrast, the UniWave™:

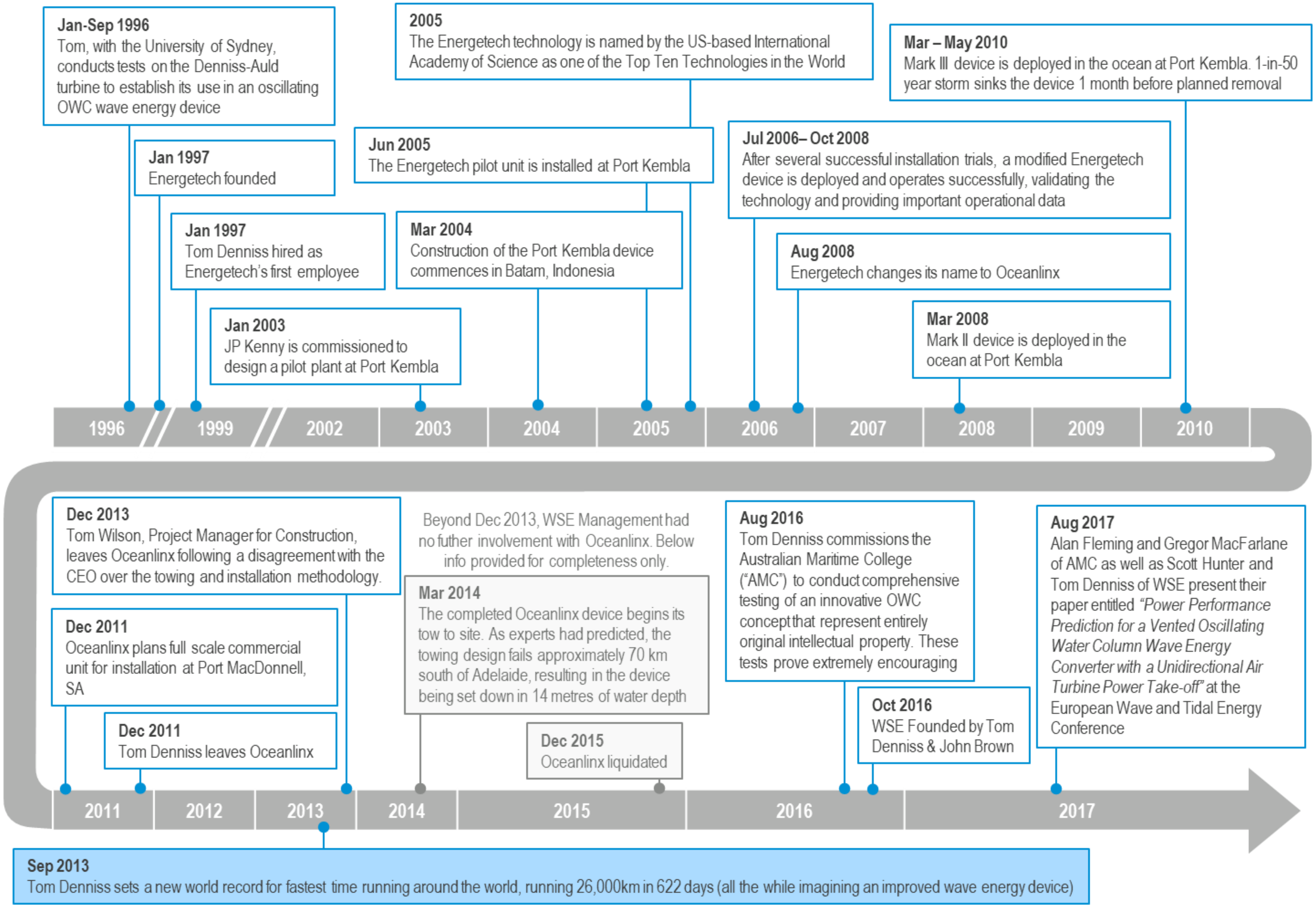
- design ensures the air flow is always from the same direction, allowing the angle of the blades of the turbine to be optimised for the air flow;
- cowling ensures the air flow is constrained so that it must pass by the turbine blades and cannot go around the blades;
- speed of the turbine at 500-1000 rpm means there is no requirement for a separate gearbox but, instead, directly drives the generator;
- is less than 10% of the height of an offshore wind turbine.

UniWave™ units can be located in a line to create a breakwater, thereby protecting the coastline or providing a safe harbour for shipping and boating.

Alternatively, units can be located in a staggered pattern to vary the timing of the wave swell hitting each UniWave™. For example, a 4MW array could consist of one UniWave™ located so as to be at the bottom of a wave trough. At the same time, a second UniWave™ is then staggered to be half way to the peak of the same wave swell, while a third UniWave™ is at the wave peak and a fourth halfway back down the wave swell. In the same way that four pistons in a car are timed to provide a smooth delivery of power, a staggered array of UniWave™ units will provide a more continuous and seamless delivery of electricity.

Additionally, variations in the direction from which the waves are approaching the device is not an issue for a shallow water wave energy technology like that of WSE. Due to the phenomenon of refraction, wave crests tend to line up parallel to the depth contours as the wave approaches shallower water. This ensures waves will always approach WSE units approximately 'head on', thereby minimising any losses of energy due to directional variations. This 'immunity' to directional variation due to refraction is not necessarily the case with deeper water wave energy technologies.

3.2.6 History of the Technology



3.2.7 Points of Difference

The Wave Swell Energy technology exhibits the following attributes:

Renewable

It is totally renewable, involving no emissions whatsoever.

No moving parts

Has no moving parts under water, unlike previous wave energy technologies, which typically failed commercially for this reason.

Simple

Is easily and cheaply operated and maintained compared to technologies with moving parts in the water.

No contaminants

Involves no hydraulic oil or other contaminants, unlike most other wave energy technologies.

Desalination

Can be used to provide a desalination capability.

Coastal protection

Provides coastal protection from erosion via incorporation into breakwaters, which is something most wave energy technologies cannot do.

Predictable

Is more predictable than solar or wind. Waves can be forecast up to seven days; wind and solar up to four hours only. For this reason, wave energy is complementary to base load power.

Aesthetics

Has low visual impact as the Wave Swell Energy would typically be located 50-200 metres off shore.

Noise

Has noise levels measured at 74 dB (equivalent to a household vacuum cleaner).

Marine life

Has no negative impact on marine life, due to the unit having no moving parts in or below the water line. Marine life is actually attracted to the unit, treating it as an artificial reef. The device itself is impervious to the presence of marine creatures, with no impact on its performance.

Wind-wave hybrid

Can be combined with offshore wind turbines. This is a rapidly growing market segment and will be a major component of the future for marine renewable energy capacity.

3.2.8 Intellectual Property

Wave Swell Energy owns all the intellectual property ("IP") associated with the UniWave™ energy conversion unit, and for the method of its operation to generate electricity.

Oscillating water columns have been applied in a range of scenarios over a period of decades. The exercise of filing a patent has confirmed that all other OWC applications have been in a bi-directional format i.e. those OWCs seek to utilise air flow from the wave entering the OWC and the air flow when the wave departs the OWC. WSE is the only party that has applied an OWC in a unidirectional format. This allows WSE to commence its series of patent claims based on the use of a unidirectional OWC. This immediately sets WSE apart from other developers of OWCs. WSE has also made claims regarding the geometry of the UniWave™, which builds on the primary claim.

Filing patent applications is done centrally in a single procedure under the Patent Cooperation Treaty ("PCT") that exists between the member countries comprising the vast majority of nations. Ultimately, the expansion of the technology into the relevant markets will be underpinned by national patent rights derived from that PCT application (PCT/AU2017/051122) over the next 2-4 years.

Using the IP attorneys Adams Pluck, Wave Swell Energy has filed patent applications which cover the apparatus itself, and the method of using that apparatus. The patent applications also protect the components of an overall system for capturing wave energy and its transformation into electrical energy. Infringement searches in Australia by Adams Pluck have not identified any significant barriers to entry at this stage. These searches to identify competitive threats from any prior-filed patent applications for OWC energy conversion technologies, as well as to locate potential acquisition opportunities, are ongoing.

Wave Swell Energy is proceeding with patent protection beyond Australia. Wave Swell Energy's IP will be expanded to patents in individual jurisdictions at the appropriate time in the near future. Countries that will be focused upon at the individual patent stage include the US, Canada, Europe, China, Japan, Australia, New Zealand, and Chile.

3.2.9 Performance

The Wave Swell Energy technology has been tested extensively at the Australian Maritime College ("AMC"), a part of the University of Tasmania. AMC staff are world leaders in the testing of wave energy technologies.

Members of the design team at Wave Swell Energy and the Marine Renewable Energy Research Group at the AMC have worked together for many years to evaluate various wave energy conversion designs. In this most recent development of the UniWave™ energy conversion unit, the technology has been extensively tested and optimised by performing comprehensive physical scale model experiments in the AMC ocean wave basin at Launceston, Tasmania.

"[The] latest experiments provide conclusive proof of concept for the new unidirectional OWC valve system, which results in further benefits by permitting the adoption of a unidirectional turbine.

I personally have had the relatively unique experience of having direct involvement in assessing the performance of a large number and wide range of different marine renewable energy technologies, including over 12 different ocean wave energy devices from around the world. There is no question in my mind that Wave Swell Energy's technology is among the best, if not the best, in all key operational aspects such as efficiency, performance, and survivability." (refer full letter of support from Assoc. Professor Gregor Macfarlane, AMC.

The 200kW unit at King Island is expected to verify the sector-leading efficiency of the design in real world conditions and at commercially viable rates. This design builds on the progress made in developing a 1:24 scale test model in collaboration with the AMC.

3.2.10 How Does Wave Swell Energy intend to generate Returns for Shareholders

Wave Swell Energy's board and senior management hold the view that the global market should attribute a significant uplift in company valuation (from the current pre-money valuation of $24m) if Wave Swell Energy delivers a commercially viable new clean energy technology that has global reach. Returns to shareholders will flow from the capital gains that are realised by this increase in company valuation. Furthermore, this uplift in valuation will be supported by the many applications for the Wave Swell Energy technology that include:

- large scale grid connected electricity;
- generation of electricity in remote locations (including islands), displacing expensive diesel;
- coastal protection and breakwaters;
- desalination; and
- hydrogen production.

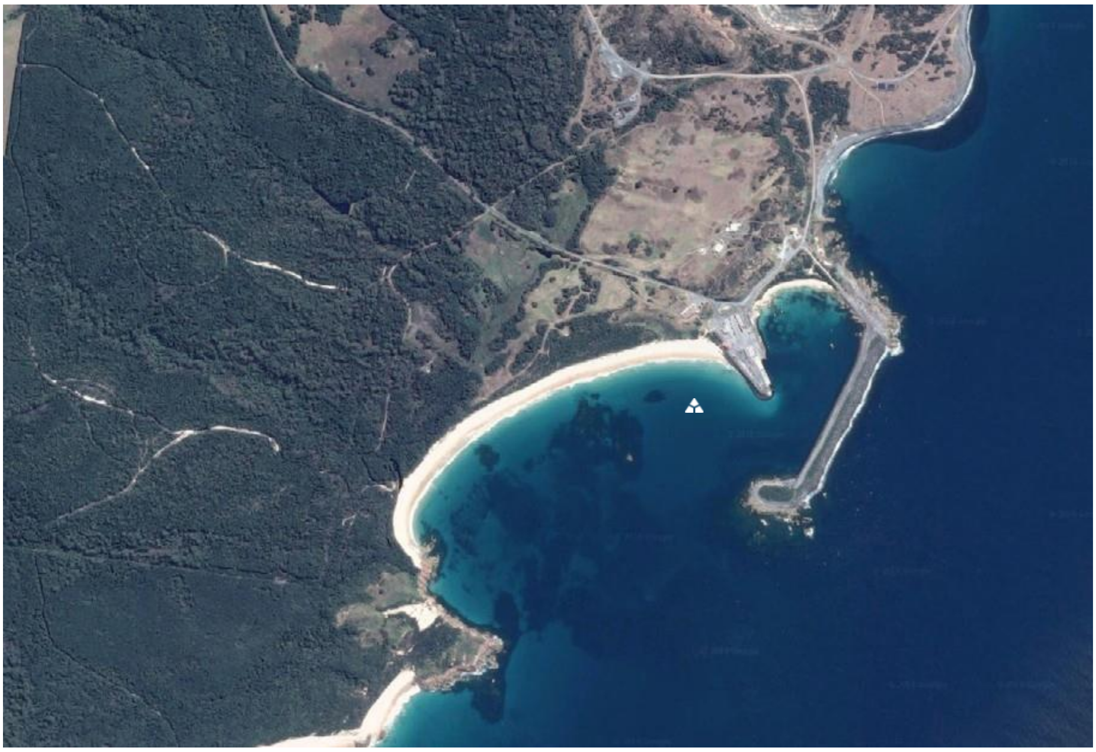
4 The King Island Project

The Wave Swell Energy project on King Island, which officially commenced on March 1, 2019, is expected to demonstrate the cost effectiveness of the technology.

The project entails the construction, deployment and operation of a 200 kW Wave Swell Energy wave energy unit adjacent to the harbour at the town of Grassy on the east coast of the island. The unit will be installed in six metres of water depth and will supply electricity to the residents and industry of King Island. Detailed design is nearing completion and construction will begin in coming months. A comprehensive site survey has been completed and wave data recorder has been deployed at the site.

The site at Grassy, on the south-east of the island, will afford the project the requisite wave conditions to prove the commercial viability of the technology, while also affording conditions benign enough during deployment to minimise risk. In this regard, it is a better location for the project than the more energetic west coast of the island.

The capital raised by WSE to date, both private and public, is being used to finance the construction of this project.



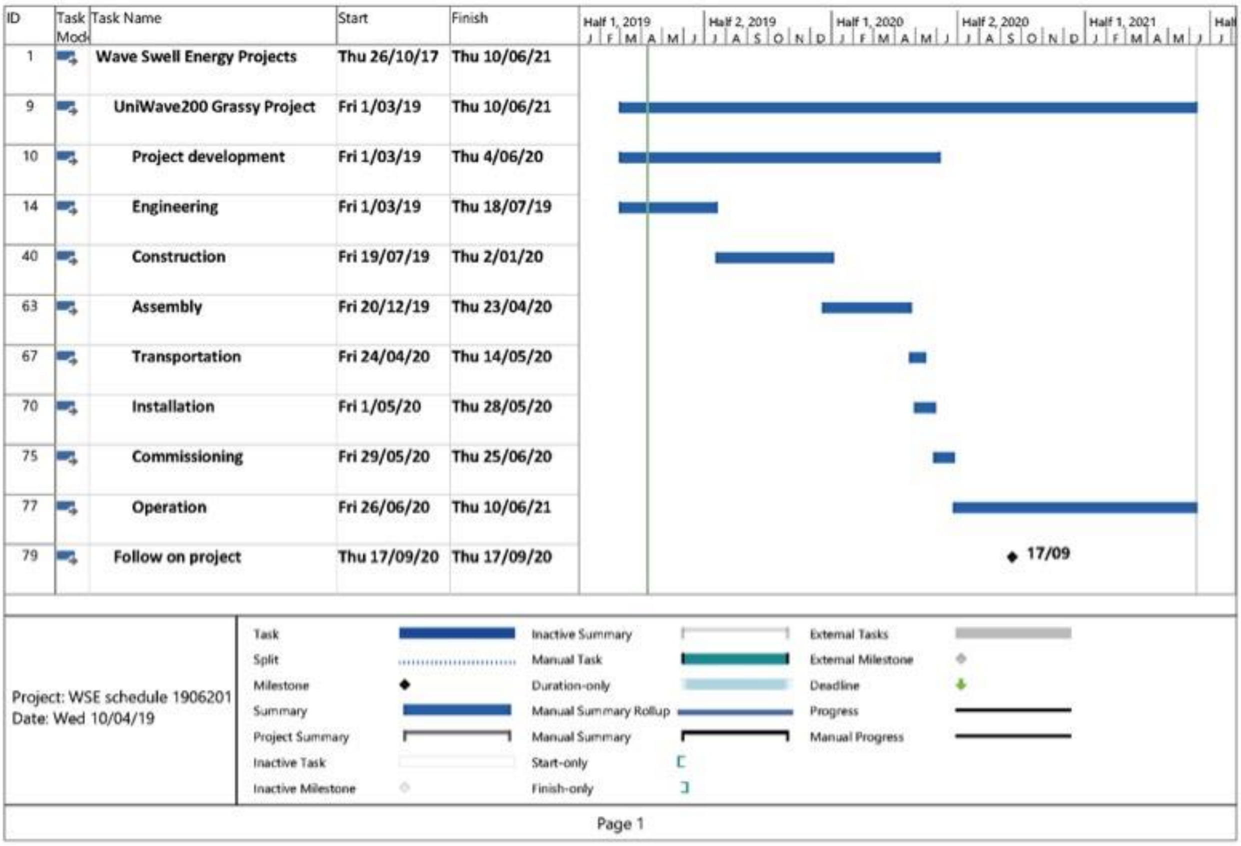
Hydro Tasmania, a world leader in the integration of renewable energy into remote island grids, is an important project partner (refer to the letter of support in Appendix A) and will be the off-taker of the electricity generated by the initial 200 kW unit via a Power Purchase Agreement ("PPA"). While this PPA does not entail a typical commercial arrangement (due to the unique nature of the project), all the standard requirements for power quality must be met by the unit, as specified in the PPA. The agreement includes Hydro Tasmania independently monitoring and validating the production of power from the WSE unit, as well as providing various land-based infrastructure upgrades in return for the provision of energy for a period of twelve months without charge.

The regulatory and permitting process is expected to proceed smoothly, concurrent with the construction of the unit itself. This has proven to be the case with similar devices in the past. The approvals process for wave energy devices in state waters is, in essence, identical to that of any other development. An independent Environmental Assessment (EA) is firstly conducted to determine if the project is likely to result in any adverse effect on the environment. If the verdict is negative – that is, no adverse effect is likely (as has been the case with all previous projects WSE staff have been involved with) - there is then no requirement to proceed to a full Environmental Impact Study (EIS), thereby greatly simplifying the permitting process. This is expected to be the case with the Grassy project.

Any subsequent scale up of the technology on King Island and mainland Tasmania will also see Hydro Tasmania as the commercial recipient of the electricity. The project also has the strong support of the King Island Council (refer to the letter of support in Appendix A).

The operational results, to be independently validated by Hydro Tasmania, are expected to indicate the technology will produce electrical energy at commercially viable rates when extrapolated to multi-unit wave farms.

The following chart illustrates the expected timeline of activities related to the King Island project at Grassy.



5 Key Achievements to Date

Intellectual property

Wave Swell Energy's intellectual property has been secured globally by way of an International Patent Cooperation Treaty application.

Performance improvements

Major performance and efficiency improvements over previous technologies have been independently verified via a comprehensive set of wave tank tests at the Australian Maritime College in Tasmania in the largest wave tank in the Southern Hemisphere. This included a comparison of the company's innovative unidirectional OWC valve system with a standard non-valve bidirectional OWC system.

Design

The conceptual design of a unit for King Island has been completed. Completion of the detailed design and the "shop drawings" for construction is imminent.

PPA

The terms of a Power Purchase Agreement with Hydro Tasmania, for the off-take of the electrical energy from the King Island unit, has been agreed. Documentation is nearing completion. While the first 12 months of operation of the project will be under a non-traditional PPA, a more typical contract will be agreed once the performance of the UniWave 2000 is determined.

Permits

The permitting and regulatory approvals process has commenced with early opinions suggesting no contentious issues.

Funding

The minimum funding required for the King Island project has been obtained through a mixture of equity investment, a non-dilutive grant for half the project cost, and a non-dilutive loan secured against future R&D rebates. WSE intends to raise additional capital to reduce the quantum of the loan, thereby freeing up the R&D rebates for use in future company operations and business development.

6 Business Model

Wave Swell Energy will develop its first commercial demonstration project at King Island. It is expected the company will 'go global' soon after. The fact this first project is local provides an opportunity for Australia to position itself as an international hub for the wave energy sector, covering all aspects of the process from technology innovation to the manufacturing of the devices.

The business model is predicated on standard electrical supply arrangements, whereby electricity generated by Wave Swell Energy units will be sold to local utility companies. In turn, the electricity will be distributed to the customers of those utility companies.

Wave Swell Energy is a technology development company, it is not a project developer. Wave Swell Energy will provide its technology to project developers for a license fee, typically in the form of a royalty or carried equity stake in each project that utilises the technology. This allows the company to remain very lean, with high margins and minimal overheads and operating costs.

As project developers install greater capacity of the technology around the world, the dividends to Wave Swell Energy from the sale of electricity accumulate at an accelerating rate, resulting in an ever- increasing annuity stream. As a result, costs remain relatively stable while revenues grow exponentially. This is a standard business model for technology companies who require minimal capital and exhibit a low commercial and development risk.

Case Study: Recurring Revenue Model

The Hawaiian and Pacific Market: Wave Swell Energy's (WSE) business model of extracting a royalty payment from each project that utilises the company's technology (whether that be a license fee, carried equity stake etc.) will result in an ever-increasing annuity stream to the company. The following example, focusing on Hawaii, illustrates what this means in terms of revenues. Note all prices are in A$, except where stated otherwise.

Hawaii is an obvious focus for WSE. It has high electricity costs, with roughly 70% currently derived from diesel generation, local opposition to wind projects, a lack of real estate for large scale solar projects, yet ample coastline exposed to a reasonable wave climate. In addition, there is a strong political focus on weaning the state off its reliance on foreign oil for energy security reasons.

Hawaii is the only state in the US that has set a deadline (2045) for achieving 100% of its electricity generation from renewables. While solar power is currently the lowest cost option for power generation in Hawaii (ostensibly under 10 cents per kWh for large projects), its capacity is limited by the availability of real estate. It also requires large scale storage capacity in order to satisfy demand.

However, it is unlikely solar will ever be capable of providing much more than 50% of the state's power requirements, due real estate being at a premium. Much of the state is mountainous and unsuitable for solar projects, with residential and commercial (mainly tourist) interests competing for the remaining flatter land.

With large scale wind projects encountering strong resistance on aesthetic grounds, the bulk of the remaining 50% of the state's generation will need to be sourced from either diesel fuel (as it currently is, at much greater cost), or from an alternative such as wave energy. It is this other 'half' of the Hawaiian market that WSE will naturally target. Sourcing power from wave energy will also reduce the reliance of the Hawaiian grid on storage, currently necessary for large scale solar generation.

Initial Hawaiian project development activities have commenced, with meetings officially scheduled between CEO, Tom Denniss, and both the Hawaiian Electric Company (HECO) officials and the US Department of Energy (DOE) for late April and early May 2019. The accompanying letter from the longest serving politician in Hawaii, Rep Cynthia Thielen, further demonstrates the strong support for wave energy in general, and the WSE technology specifically.

It has been suggested in preliminary discussions that Hawaii is open to an initial 100 MW of wave energy generation when a supplier is ready to deliver this level of capacity. Let's be conservative and consider an initial 50 MW project using the WSE technology. Such a project would take a few years to implement but would come on line progressively during that period.

The average price for electricity in the state varies both over time (mainly due to the fluctuating oil price) and from island to island. This average was 33.45 US$ c/kWh in June 2018 (reference: https://www.eia.gov/state/rankings/?sid=HI#series/31). This was made up of the more expensive diesel generation and much lower cost energy from rooftop solar, geothermal, and assorted other sources. The diesel component of the state's electricity generation is believed to average around 40 US$ c/kWh, in line with (though slightly less than) the average avoided cost of diesel for other Pacific Islands of 45 US$ c/kWh (reference: Pacific-Energy-Update-2018).

Based on these prices, and on the expectation that a wave energy project is likely to command a price for its generation equal to the avoided cost of diesel fuel, we have assumed a conservative price of 20 US c/kWh (equivalent to 28 A$ c/kWh) for energy from WSE projects in Hawaii for this analysis. When this price is applied to a 50 MW project in Hawaii, with a typical capacity factor for the region of 25%, the resulting economics are as follows – for a project with a 20 year life, a cost of borrowing of 7%, a discounted cash flow rate of 10%, a 75:25 debt to equity ratio, and utilizing a typical REC price of 8.7 c/kWh, the project returns an IRR of 24% to the project equity sponsor, after royalty payments to WSE. Moreover, based on a moderate 5 c/kWh royalty revenue to WSE for both these scenarios, the total revenues to WSE over the project's 20 year life amount to $126 million, or more than $6 million per annum.

This is the annuity to WSE from a single large project in Hawaii. And with a successful initial project, capacity in the state from WSE projects can be expected to increase rapidly. It is the cumulative effect of the additional capacity that will see WSE's annuity stream increase at an accelerating rate. With a total generation capacity of 1727 MW as of 2018, there is clearly scope for a significant scale up of the WSE technology in Hawaii and corresponding revenues to the company.

And, given that the population of the rest of the Pacific (in regions conducive to the WSE technology) is roughly equal to that of Hawaii, the market throughout the Pacific is clearly large. And these other Pacific locations will certainly command an even higher price than that of Hawaii for electricity from WSE wave projects.

There is, of course, a degree of speculation in the above analysis in terms of the price received for the electricity and WSE’s cut of the revenues. However, the scenario is broadly realistic and indicative of the potential future annuity stream for the Pacific region.

The Broader US Market: The United States (U.S.) has significant untapped marine renewable energy resources. We have highlighted Hawaii as an example of a suitable project, but project opportunities on the coastline of the US mainland are substantial.

The enthusiasm for marine renewable energy resources in the U.S. is almost unprecedented. It is acknowledged that wave energy provides predictable, consistent renewable power that can materially contribute to the U.S. nation’s energy supplies.

The U.S. Department of Energy's (DOE) own assessments estimate the 'technically extractable domestic marine renewable energy resource potential represents up to 25% of projected U.S. electricity generation requirements by 2050 (DOE Water Power Program FY 2018 Funding)’. In fact, the DOE has been allocated US$70 million to fund the advancement of marine renewable technology for the FY 2018.

The DOE is charged with the responsibility to unlock the potential for marine resources. It is acknowledged that marine energy addresses the nation's security, economic and environmental goals. "Marine energy technologies have the potential to provide millions of Americans with locally sourced, affordable, and reliable energy," said Daniel Simmons, Principal Deputy Assistant Secretary for EERE (Office of Energy Efficiency & Renewable Energy). Not surprisingly, U.S. project opportunities will be a focal point for WSE.

7 Growth Opportunities

Applications for the Wave Swell Energy technology include:

- large scale grid connected electricity;
- generation of electricity in remote locations (including islands), displacing expensive diesel;
- coastal protection and breakwaters;
- desalination; and
- hydrogen production.

The Wave Swell Energy technology is globally applicable. Wherever there are coastlines, it is likely the technology will be relevant. While Australia exhibits a particularly good wave climate and is a prime focus of Wave Swell Energy, the company will be quick to diversify geographically, specifically targeting markets where wave energy is abundant, and the cost of electricity is high. Remote island locations relying on diesel oil for power generation are an obvious candidate for early stage projects using the Wave Swell Energy technology

Artists impression of a wind / UniWave hybrid unit

Artists impression of UniWave devices incorporated into a breakwater

8 Business Strategy

8.1 Introduction

Once the fund-raising activities associated with the King Island project have concluded, Wave Swell Energy will embark upon a strategy, one that will see the global installed capacity of the technology increase at an accelerating rate. This will drive down the levelised cost of energy ("LCOE") produced by Wave Swell Energy projects (see section 2.7.1 for further information on LCOE). It is this expansion of projects utilising the company's technology that will result in both a financial benefit to Wave Swell Energy shareholders, and an environmental benefit on a global scale.

8.2 Technology Strategy

In tandem with the company's Commercialisation Strategy, the Technology Strategy will continue in two important directions. Firstly, the performance and conversion efficiency of Wave Swell Energy devices will continue to be improved through constant innovation and technology development. Although the Wave Swell Energy technology is already highly efficient compared to other technologies, the team will not be resting on its laurels. There are always means to a better product and, in conjunction with the world class research staff at the Australian Maritime College, the technology will continue to be refined and improved.

Secondly, the cost of construction, deployment, and operation will continue to be driven down as the Wave Swell Energy team explore improved manufacturing techniques incorporating state of the art materials and structural design methods. The team has already commenced preliminary investigations into the incorporation of cheap hybrid materials, such as recycled plastics, some of which may eventually be sourced from clean-up of the Great Ocean Garbage Patch, into its structures. It is this dual improvement of increased output due to better conversion efficiency, combined with lower construction costs, that will be vital to the technology eventually assuming its place as one of the cheapest forms of electrical energy in the world.

8.3 Commercialisation Strategy

Commercialising the Wave Swell Energy technology will effectively occur over three phases. The initial phase involves the King Island project. This project should validate the commercial viability of the technology, demonstrating an ability to produce electricity from waves.

The Wave Swell Energy medium term (1 - 3 years) commercialisation strategy is to reduce the LCOE through the expansion of the installed capacity of the technology. However, the only practical way to ensure projects are developed is to ensure that they are profitable. This can be achieved by targeting the 'low hanging fruit' – locations with good wave climates where the current cost of electricity is relatively high. Such locations include remote and island communities that currently rely on diesel. These locations range from the very small capacity (e.g. Lord Howe Island) to the much larger capacity (e.g. Hawaii). Displacing the need for diesel fuel for the generation of electricity in these remote regions is a high political priority, but it also makes strong commercial sense.

The longer-term (> 3 years) commercialisation strategy of the company is to expand into the standard grid connected markets as the technology's LCOE reduces. This can only be accomplished once the combination of increased energy production and lower construction and operational costs are realised. The migration of the technology to the mainstream grid will be achieved via a phased approach, with the higher cost energy markets targeted first.

8.4 Strategic Partnerships

The large-scale installation of the Wave Swell Energy technology within a short time frame will not be achievable using the resources of Wave Swell Energy alone. The company could choose to grow organically into both a project development company as well as a technology development company, but this strategy would take several years.

As a result, Wave Swell Energy will seek to partner with a large multinational energy or construction company with the resources capable of scaling up the development of Wave Swell Energy wave energy projects rapidly and successfully. Wave Swell Energy management has already participated in preliminary discussions with potentially interested partners of this calibre.

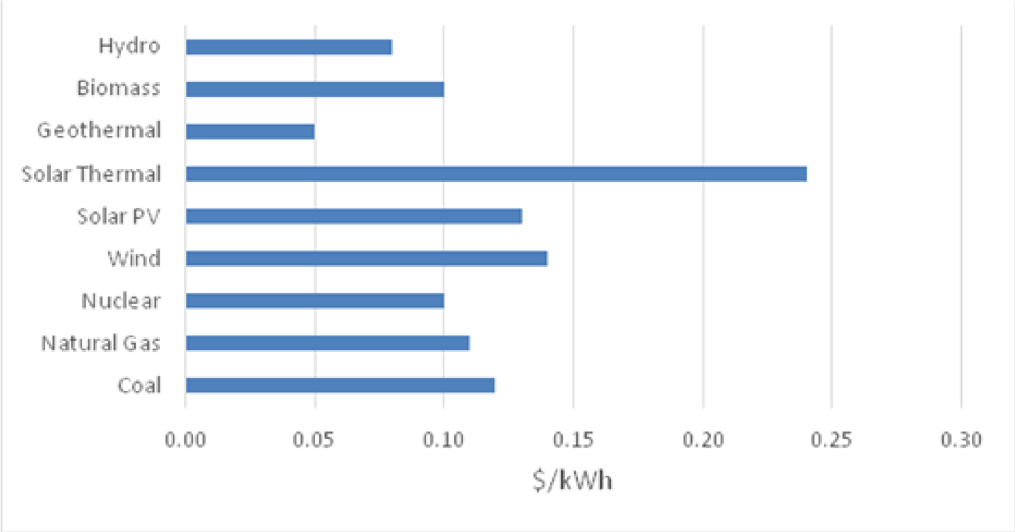
While these discussions must remain confidential at this stage, such a partnership will play an important role in Wave Swell Energy's strategic aspirations. It is expected that Wave Swell Energy could command significant interest from domestic and multinational organisations in the global energy and infrastructure markets after the successful demonstration of its wave energy technology combined with the development of a pipeline of future projects. Along with strategic commercial partnerships, it is expected the company will continue its research partnership with the Australian Maritime College. This established partnership is expected to add further value well into the future, as will the important relationship with Hydro Tasmania.

8.5 Strategic Objectives

The strategic objective of Wave Swell Energy, as alluded to in the preceding sections, is to firstly demonstrate the commercial viability of its ocean wave energy generation technology via the King Island project. This will be followed by several commercial projects in remote locations where expensive diesel generation is displaced, and more mainstream grid connected regions where the existing cost of energy warrants the development of projects. The objective will be to gradually increase the capacity of these projects as the technology's cost of generation decreases, opening up the technology to more and more commercially viable locations.

Eventually the cost of generation should be low enough for the technology to be competitive with the most economical of existing generation sources (wind, solar, coal etc). The company's overarching strategic objective is to achieve this mainstream competitiveness within five to ten years, while being highly profitable in more remote markets in the interim.

Another important strategic objective for the technology will be to act as revenue generating breakwaters, protecting harbours and coastlines from the extremes of the oceans. Desalination and hydrogen production are also logical uses for the technology. All of these options will be explored and are expected to be part of a diverse range of applications for the technology.



US Levelised Cost of Energy

9 Industry Overview

9.1 Levelised Cost of Electricity ("LCOE")

LCOE is the standard means of comparing costs for different energy generation technologies. Its calculation is somewhat complicated but can be summarised in a fairly simple way – the lifetime cost of the plant (construction, operation, decommissioning etc.) divided by the lifetime amount of energy produced. The result is a number measured in cents per kilowatt-hour (¢/kWh).

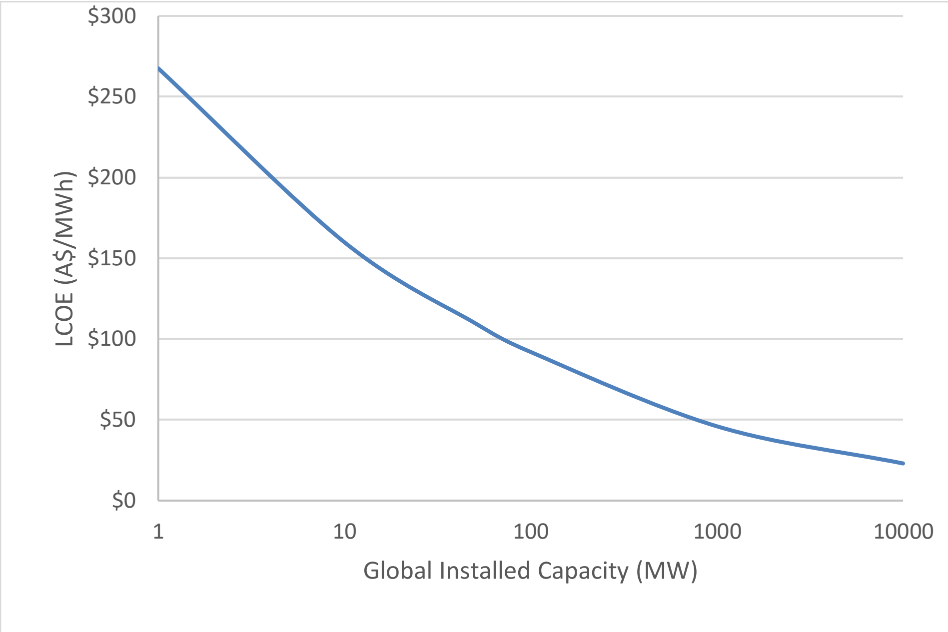
The long-term goal of Wave Swell Energy is to generate electricity from ocean waves at a cost which is equal to or below that of other renewable and traditional fossil-fuel sources when compared on a like-for-like basis. The chart below, provided by the US Department of Energy in 2013, illustrates such a comparison between existing commercial sources of renewable and fossil-fuel energy within the US. Virtually all traditional forms of fossil fuel energy generation exhibited an LCOE above 10 cents per kWh at that time. These costs have increased and will inevitably rise further into the future.

Renewable sources, however, have reduced in cost quite significantly since 2013. Such will be the case with wave energy in the future, including the technology of Wave Swell Energy.

Based on the energy output indicated by comprehensive tank testing at AMC, along with actual quotes for construction, Wave Swell Energy believes it will be possible to produce energy from waves, for projects of 100 MW or more, at a cost approaching 10 cents per kWh. A forecast LCOE in the vicinity of 10 cents per kWh ($100/MWh) for projects of 100 MW represents a leap forward in the commercial readiness of wave energy as a sector and would secure Australia's position as the world leader in marine energy generation.

The demonstration of this capability will result in Wave Swell Energy commencing its commercial phase with a lower LCOE than most other forms of energy generation in the world exhibited at the same point in those technologies' commercial development.

The technology is best suited to producing electrical energy in regions with good wave climates. Notably, the wave climates along the south and west coast of Australia are among the best in the world, alongside the west coast of North and South America, Europe, parts of Africa, and many of the more remote regions of the globe, such as islands of the Pacific, Indian, and Atlantic Oceans. Where a lesser wave climate prevails, generation costs will be commensurately higher, though still often lower than other local forms of energy generation.

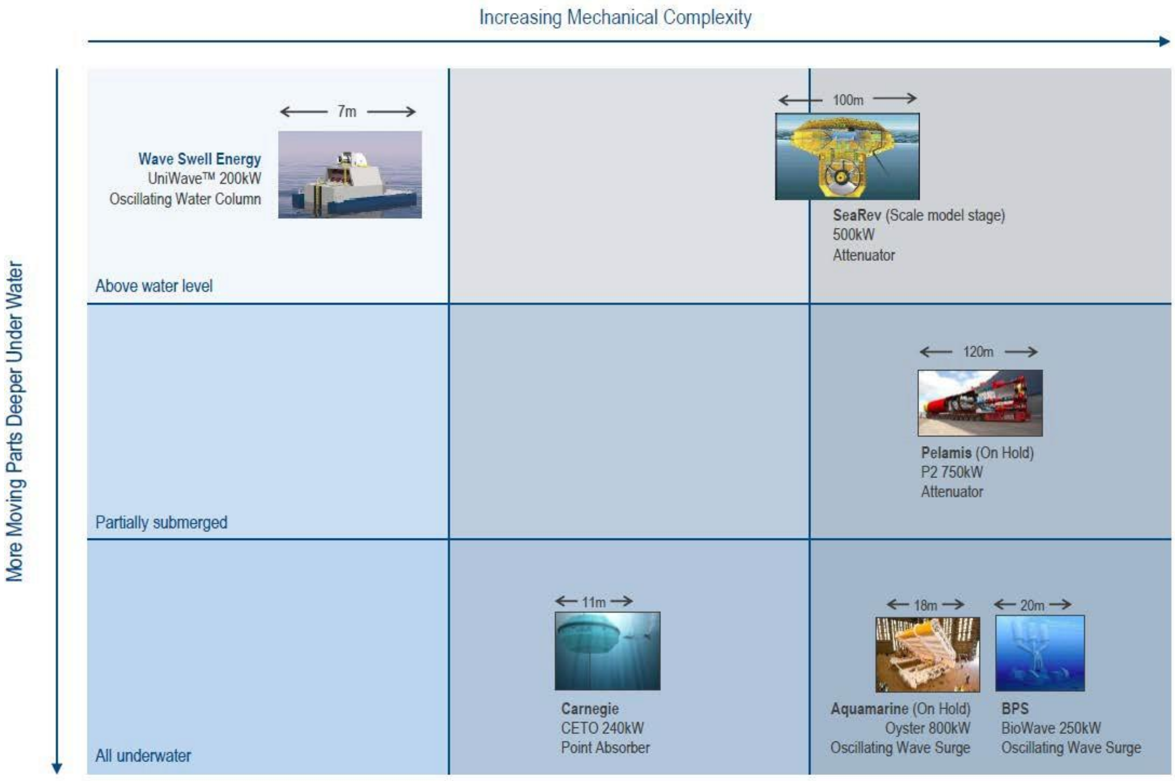


Predicted LCOE for the Wave Swell Energy technology versus Global Installed Capacity

9.2 Competitive Landscape

The Wave Swell Energy technology is considered "nearshore". It is applicable in depths of 5 – 15 metres. These depths can usually be found within one kilometre of the coastline. In contrast, the technologies of most of Wave Swell Energy's competitors are only possible in much deeper waters of 30 metres or more. For this reason, Wave Swell Energy has no known nearshore competitors in Australia, and virtually none in the world.

However, outside the nearshore environment, the company will be competing on price with both deep-water wave energy technologies and, more broadly, with other forms of renewables such as wind and solar. Deep water wave energy competitors include Carnegie, OE Buoy, and Wello, although Carnegie is the only one of these based in Australia (and has recently been placed into administration). However, the nearshore regime will afford the technology unique opportunities for energy generation not applicable to these alternatives - for example, in Hawaii, where solar farms take up too much valuable real estate, wind farms have proved unacceptable in a tourist market, and the lack of a continental shelf does not lend itself to deep water wave energy technologies.



Schematic illustrating various of existing and past wave energy technologies

9.3 How Wave Swell Energy Keeps Costs Low

The bulk of the cost of a UniWave™ unit is in the construction of the OWC chamber, the concrete structure that sits semi-submerged in the ocean. However, this component of the technology is where the greatest economies of scale lie. The manufacture of large numbers of units, with the sharing of infrastructure costs, will result in a significant reduction in production costs. The more complex aspects of the technology – the turbine and electronics – are the only parts that will require regular maintenance, but these represent only about 20% of the costs of a unit over its lifetime.

The combination of economies of scale and "learning curve effects" are expected to reduce the cost of energy from UniWave™ units dramatically over coming years. The International Energy Agency (IEA) studied 108 different technologies from the previous century and found a very compelling statistic – for every ten-fold increase in the installed capacity of the technology, energy costs reduced by half. This trend has been witnessed most recently by the energy cost reductions of both wind and solar energy.

There is no reason to expect the Wave Swell Energy technology to be any different. Wave Swell Energy is expecting to commence its commercial phase with a cost of energy approaching 10 cents per kWh by the time 100 MW of the technology is installed. What this implies, in conjunction with the IEA study, is the Wave Swell Energy cost of energy is likely to reduce to 5 cents per kWh by the time 1,000 MW is installed globally, and to around 2.5 cents per kWh by the time 10,000 MW is installed. This is lower than wind and solar energy at the moment, despite these technologies having far more than 10,000 MW installed globally.

10 Forecast Project Economics

The economic viability of future Wave Swell Energy projects will depend on many financial and physical parameters. The company's detailed project economics spreadsheet includes all these various parameters, allowing for an accurate evaluation of the financial prospects of any project. That said, there are some parameters that are more critically important to the economics of projects than others. Of these, it is the local wave climate and price paid for the electricity that are the two most crucial variables when it comes to determining the viability of a Wave Swell Energy project.

Wave Swell Energy's first project will be a 200kW unit on King Island in Bass Strait. Hydro Tasmania has indicated a preference for a unit of this capacity. The project is not specifically designed to provide a commercial return – rather, it is designed to be a demonstration of the commercial viability of the technology when deployed at larger scales.

Although the conditions of the project agreed with Hydro Tasmania are non-standard, if it were to be conducted under typical financial terms (for example, an interest rate of 7%, a discount rate of 10%, and utilising a normal remote island avoided cost of diesel of 50 c/kWh and, utilising the King Island wave data available to WSE for the island's west coast, the project would experience a return on investment (ROI) of approximately 25%. This result owes much to the very good wave climate on King Island and a significant non-dilutive source of funding. In general, however, it will be the larger capacity projects that will normally display the best economic returns.

Wave Swell Energy's medium-term business plan will see it immediately expand its operations to other remote island locations and appropriate grid connected regions upon the successful demonstration of the King Island project. Many of these remote island locations are expected to be in the Pacific Ocean. The wave climate in this region varies from very good in the more temperate latitudes, to moderate in the tropics. Lord Howe Island has been chosen as a typical example of such a project, and one that is likely to be deployed in the near term. There is an added reason to focus on this location, as there are indications such a project is likely to be a candidate for a substantial level of non-dilutive funding.

The cost of diesel generation in remote regions varies over time and from location to location. That said, the typical avoided cost of diesel on Lord Howe Island has been around 60 c/kWh for some time (e.g. quoted as 62.2 c/kWh by LHI Energy Supply Roadmap in 2011). It is not unreasonable to expect a wave energy project to command a similar price for its produced energy. A single one-off 1 MW WSE project on Lord Howe Island (which is about the maximum demand likely to exist in the medium term) would cost around $9.5 million – a cost which could be shared by government. Using these figures and other standard economic inputs, along with an expected average wave power density of 25 kW/m of wave front, results in a cost of generation (more technically known as the LCOE of 43 c/kWh and a ROI of 57%. Without the capital grant, the ROI reduces to 25%.

Lord Howe Island is a small niche market, although a potentially lucrative one given the price of diesel generation on the island. Construction and other costs will always be high for one-off units produced for such locations, unless built as part of a bigger project where economies of scale kick in, with a single device being 'shipped in' from a central construction site. This latter strategy will be employed over the longer term to ensure projects are even more financially attractive.

Key Non-Varying Financial Parameters Used in the Above Calculations

Project Life	**20 years**
Annual inflation rate	2.5%
Annual maintenance costs	2.5% of capital cost
Annual interest rate on borrowing	7%
Repayment term	20 years
Interest on cash reserves	3%
Discount rate on cashflows	10%
Government Renewable Energy Certificates	8.7 c/kWh

Project returns

Project Size	**Location**	**IRR (annual)**	**ROI (lifetime)**	**NPV**
1 MW	Lord Howe Island with grant	46%	57%	$2.54M
1 MW	Lord Howe Island without grant	18%	25%	$5.41M
5 MW	Pacific no debt	20%	83%	$24.2M
5 MW	Pacific 75% debt	43%	101%	$29.4M
50 MW	Hawaii 75% debt	46%	108%	$190M

Note: These IRR and ROI figures refer to the returns to the project equity sponsor, after royalties are directed to WSE

A more conventional approach to financially lucrative projects is to focus on larger capacity deployment in regions that currently employ diesel for electricity generation. There are many larger island nations that satisfy this requirement (e.g. Fiji, Vanuatu), and also have a good wave climate. A 5 MW project in such a jurisdiction, with each MW estimated to cost around $6 million to install and using similar standard financial parameters as those described above, would see a LCOE of 29 c/kWh and a ROI of 83%. With a 75:25 debt to equity ratio in place, the ROI increases to 101%.

Finally, a 50 MW Wave Swell Energy project in Hawaii, where 70% of all current electricity is generated using diesel, should command an energy price of around US 20 c/kWh (the average for Pacific Islands is US$0.45/kWh[7]). Although the Hawaiian wave resource is slightly lower than most South Pacific Ocean locations, the added scale results in attractive economics for wave energy projects. Again, using the same general parameters as the examples above, a 50 MW Hawaiian project costing around $3.5 million per 1 MW unit, should result in a LCOE of 27 c/kWh (i.e. US 19 c/kWh) and a project equity sponsor IRR of 24%.

The table above summarises these results but, for good measure, a more conservative estimate of both ROI (50% less than that calculated) and LCOE (20% greater than that calculated) is included. This is to acknowledge that estimates of the wave climate, the capital cost of units, and the price received for the generated energy in each location comes with a degree of variability.

It should be noted that the cost of generation from Wave Swell Energy projects will, in fact, be significantly lower when installed at large scale in locations with exceptional wave climates (e.g. southern Australia). For example, a 100 MW project in a location like Portland Victoria could be expected to result in a LCOE of around 10 c/kWh, even at an early stage in the technology's commercial phase. This cost will come down further as more and more global capacity is installed. In fact, based on the seminal 2000 report of the International Energy Agency (IEA), by the time the Wave Swell Energy technology reaches 1,000 MW of installed capacity, the LCOE in regions of excellent wave climate should be approaching 5 c/kWh.

[7] Pacific-Energy-Update-2018

11 Directors and Management

Dr Tom Denniss

Co-founder, Chairman, Chief Executive Officer
B. Math, B. Sc (Honours Class 1), PhD

Tom has a PhD in Mathematics and Oceanography and has been involved in the wave energy industry for more than 25 years. Besides having invented the technology of Wave Swell Energy, Tom served as the Australian Government's representative on the International Energy Agency's Ocean Energy Systems Executive Committee from 2007 to 2011, as well as on the Global Roundtable on Climate Change, an initiative of the Special Adviser to the Secretary General of the United Nations, from 2005 to 2009. Tom was the first person to be inducted into the International Ocean Energy Hall of Fame in 2007, has served on the Australian Government's Advisory Board for the Clean Energy Innovation Centre, and is a current member of the CSIRO Advisory Committee for the Australian Wave Energy Atlas Project. In 2013 Tom set a new world record for the Fastest Circumnavigation of the Earth on Foot, running the equivalent of 622 marathons in 622 days. He was also a finalist in the 2014 Australian of the Year competition.

John Brown

Co-founder, Board Member, Chief Operating Officer
B. Bus (Econometrics), CFP

John has more than 25 years' experience in investment banking and financial services. He has worked for leading global investment banks in New York, London, Singapore, Sydney and Melbourne. John's career includes foreign exchange trading, corporate advisory work and wealth management advice. John worked closely with Tom Denniss during the 1990s in the Treasury and Commodities division of Macquarie Bank, building trading models and taking them to market. John has had a strong interest in the renewable energy sector for the past 20 years.

Scott Hunter

Chief Technology Officer
B. Eng (Nav. Arch.)

Scott is the Chief Technology Officer and has been working in the ocean renewables industry for 15 years. Scott has a Bachelor of Engineering in Naval Architecture from the University of New South Wales. Scott has spent 13 years developing wave energy technologies from small R&D projects to the deployment of full-scale wave energy converters. Prior to joining Wave Swell Energy Scott spent 18 months in the USA developing tidal energy technologies with a leading company in this field.

Tom Wilson

Project Manager
B. Eng (Civil)

Tom has been working in the renewable energy sector for three years, with a particular interest in wind, wave and biogas technologies. Tom has a degree in Civil Engineering from the University of Technology Sydney, and is a member of the Institution of Engineers, Australia. He spent his initial years in the building and construction industry as a managing director of engineering companies in Australia, the UAE and the UK, providing specialist engineering services on government, commercial and private projects. Involvement in various civil and marine projects saw him transition to become an owner-operator of a dredging company and sub-sea cable burial company. More recently, he has worked as marine construction engineer on bridge and jetty construction for major civil and oil and gas infrastructure projects.

Ian Coltman

Board Member
LLB, B. Ec, Grad Dip Bus Admin

Ian is the founder and principal of Coltmans Legal, a boutique legal practice advising on corporate and commercial law, as well as financial services regulation. Ian has practised law for more than 30 years. Before establishing Coltmans Legal, Ian worked at leading law firms in Melbourne and London, was Head of Legal in Australia for a global fund manager and was an Assistant Director at ASIC. Ian has extensive corporate experience through his advice to boards on a broad range of issues, his hands-on involvement as a director on a number of voluntary boards and his role as company secretary for numerous public and private companies. Earlier in his career Ian was a commercial litigator, conducting disputes involving a broad range of corporate and commercial issues. He has run major actions, several of which are now reported cases, including Water Wheel, ASIC's landmark insolvent trading claim. As a director of Wave Swell Energy, Ian's Board responsibilities include legal, compliance and governance.

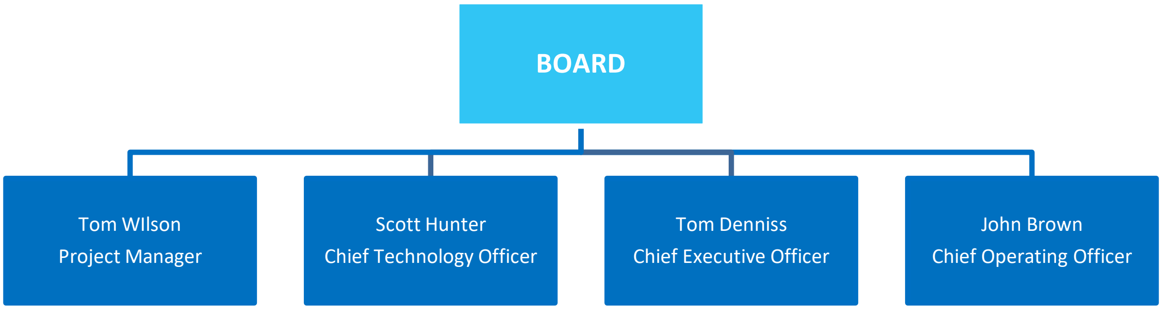
Greg Winnett

Board Member
B. Bus (Accounting), CA

Greg is a partner at Accru Melbourne, a comprehensive financial services business, and has more than 30 years' experience working with corporate and private clients. He is a member of Chartered Accountants Australia & New Zealand, a registered company auditor and tax agent. Greg specialises in audit and assurance services and has built a wealth of knowledge across many industries. Clients include public and private companies based in Australia and overseas, large proprietary companies, incorporated associations, trusts and other reporting entities. Professional involvement with a diverse client base has enabled Greg to develop a comprehensive understanding of business systems, information technology, corporate governance and financial management. As a director of Wave Swell Energy, Greg's Board responsibilities include accounting, finance and governance.

11.1 Management Structure

The current management structure is shown below



12 Audited historical financials

12.1 Profit and Loss Statement

	30-Jun-17 ($)	30-Jun-18 ($)
Other Income	807	1,016,856
Project development costs	(604,208)	(203,441)
Project payroll costs	(699,404)	(951,069)
Project administrative expenses	(237,400)	(233,233)
Marketing expenses	(22,612)	(5,567)
Other expenses	(66,853)	(126,387)
Loss from operations	(1,629,670)	(502,841)
Income tax expense		
Loss for the period	**(1,629,670)**	**(502,841)**
Other comprehensive income	-	-
Total comprehensive loss for the period	**(1,629,670)**	**(502,841)**

12.2 Balance Sheet

ASSETS	30-Jun-17 ($)	30-Jun-18 ($)
Current Assets		
Cash and cash equivalents	582,444	112,771
Trade and other receivables	-	461,015
Total current assets	582,444	573,786
Non-current assets		
Intangible assets	19,200,000	19,200,000
Total non-current assets	19,200,000	19,200,000
Total assets	**19,782,444**	**19,773,786**
LIABILITIES		
Current liabilities		
Trade and other payables	156,681	129,522
Employee benefits	33,033	35,268
Total current liabilities	189,714	164,790
Total liabilities	189,714	164,790
Net assets	**19,592,730**	**19,608,996**
EQUITY		
Issued capital	21,222,400	21,741,507
Accumulated losses	(1,629,670)	(2,132,511)
Total Equity	**19,592,730**	**19,608,996**

12.3 Cash Flow Statement

	30-Jun-17 ($)	30-Jun-18 ($)
CASH FLOWS FROM OPERATING ACTIVITIES		
Payments to suppliers & employees	(1,522,506)	(1,487,342)
Interest received	807	256
GST refund and R&D tax incentive received	81,743	610,813
Net cash provided by/(used in) operating activities	**(1,439,956)**	**(876,273)**
CASH FLOWS FROM FINANCING ACTIVITIES		
Proceeds from issue of shares	2,022,400	406,600
Net cash used by financing activities	2,022,400	406,600
Net increase/(decrease) in cash and cash equivalents held	582,444	(469,674)
Cash and cash equivalents at beginning of year		582,444
Cash and cash equivalents at end of financial period	**582,444**	**112,771**

12.4 Movements in Equity

30-JUN-17	Ordinary Shares ($)	Retained Earnings ($)	Total ($)
Balance at 12 Oct 2016	-	-	-
Loss attributable to members	-	(1,629,670)	(1,629,670)
Shares issued during the period	21,222,400	-	21,222,400
Balance at 30 June 2017	**21,222,400**	**(1,629,670)**	**19,592,730**

30-JUN-18	Ordinary Shares ($)	Retained Earnings ($)	Total ($)
Balance at 1 July 2017	21,222,400	(1,629,670)	19,592,730
Loss attributable to members	-	(502,841)	(502,841)
Shares issued during the period	519,107	-	519,107
Balance at 30 June 2018	**21,741,507**	**(2,132,511)**	**19,608,996**

13 Risks facing the business

13.1 Key Risks

Risk is commonly described as the effect of uncertainty on a company's objectives. Risk or uncertainty may result in a positive or negative outcome. Below is a description of the main risks facing the Company. Only the risks that the Company considers may significantly impact the success or failure of the business have been included.

Investors should read this section carefully before deciding to apply for shares under the Offer. There are also other, more general, risks associated with the Company (for example, risks relating to general economic conditions or the inability to sell our shares).

Two risk workshops were undertaken during 2017. This, combined with past lessons learned and feedback from world leading wave energy experts, resulted in the following key risks being identified:

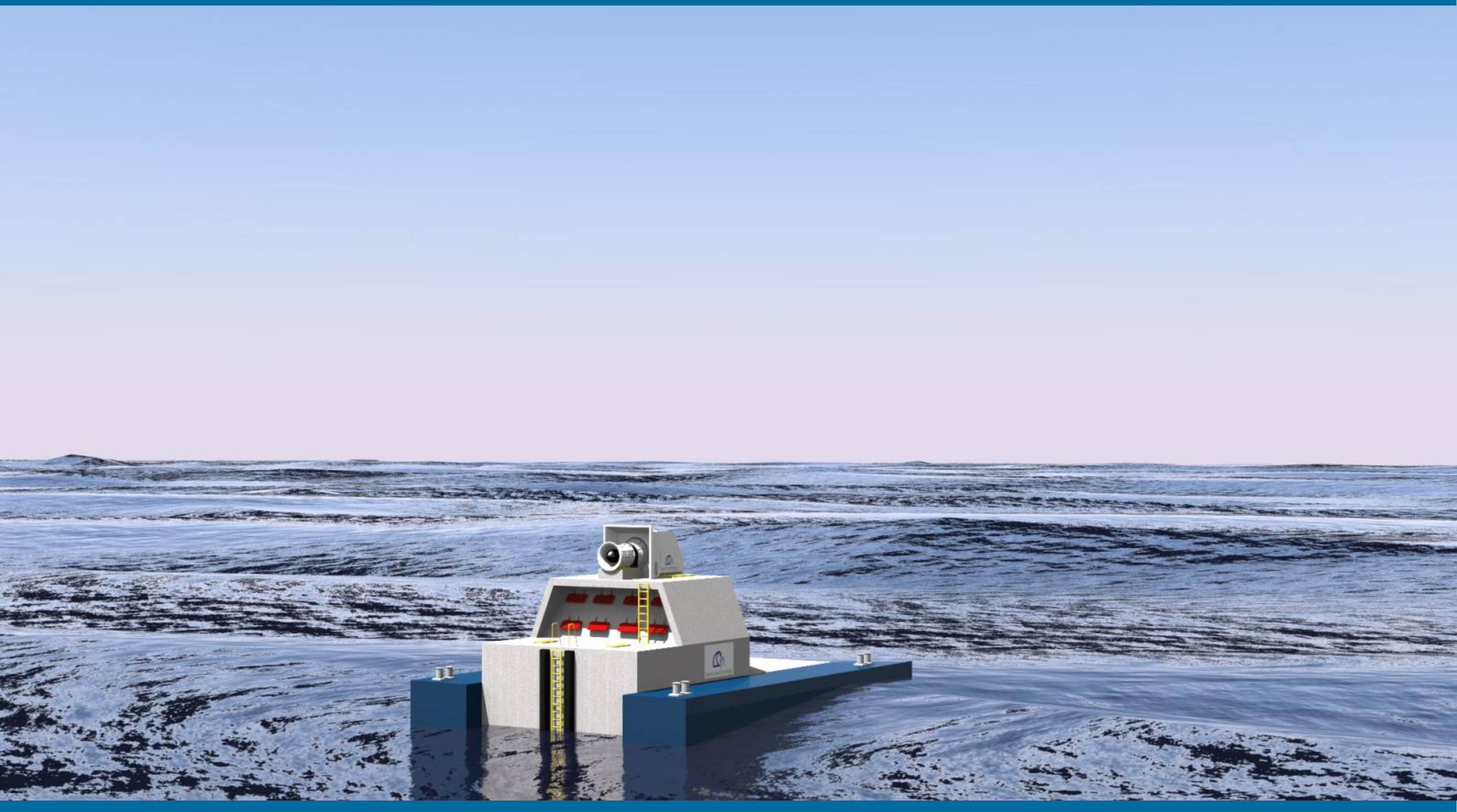
RISK	DESCRIPTION
Cost overruns	The potential for an increase in the cost of construction of the King Island project could delay the successful demonstration of the commercial potential of the technology. Operational costs may also turn out to be greater than expected.
Failure during sea tow	Some past wave energy units have had issues while being towed to their deployment locations. Unexpected storms and human error during the towing process can lead to catastrophic outcomes for the particular unit being transported to site.
Geotechnical	Situating units on the sea floor is strongly dependent on the sea-bed conditions. Difficult seabed terrain can pose problems for the deployment of units. While detailed surveys will be conducted, human and machine error during the positioning phase may result in an inaccurate location. A small positioning error could result in lower operational efficiency.
Access for O&M	Access for operation and maintenance of wave energy units has been problematic for previous wave energy technologies. While routine maintenance will be planned during benign weather, emergency attention to aspects of the unit may be required in more severe weather conditions, creating risks to staff and equipment.
Reliance on Key Personnel	The operation of Wave Swell Energy and the future development of the technology is heavily dependent on current management. The loss of key personnel will diminish the effectiveness and knowledge base of the company.

RISK	DESCRIPTION
Survivability In-Service	The survivability of units has been a major issue for many previous wave energy technologies. Cost effective survivability is crucial to commercial success. While every effort has been made to design the unit to survive the worst possible weather, there is nonetheless a non-negligible chance of the unit suffering damage during the worst of weather events.
Funding	Early stage companies may require additional capital. Wave Swell Energy will require some level of on-going funding post the King Island project to enact its longer-term business plan. In the near term a failure to raise the minimum required to match the non-dilutive source of funding will delay the King Island project significantly. If the federal government were to alter legislation related to the R&D rebate scheme, this could impact the company's R&D loan.
Regulatory risk	Although early indications regarding permitting are favourable toward the Wave Swell Energy technology, large scale installations may encounter opposition. Regulatory and environmental risks include biological, geological, and aesthetic. There is always the possibility that unknown regulatory issues may arise in regard to the King Island project, potentially delaying or preventing permits and approvals being granted.
Scalability risk	Strong financial success of the company relies on the ability to scale the technology to projects encompassing hundreds of megawatts. This will require greater regulatory scrutiny and a much greater requirement for funding, each may result in a level of risk.
International expansion risk	Regulatory requirements vary from country to country, potentially posing issues and delays for projects. In addition, a lack of under- standing of the nuances of permitting in foreign jurisdictions may involve risk.
IP Risk	While applications in the PCT phase provide global IP protection ahead of the mandatory transition to the National Phase, it is not until this final phase that individual patents in countries of interest are actually granted. While extensive international searches have failed to identify any prior IP the Wave Swell Energy technology might infringe upon, there is always a possibility a yet to be revealed case of prior art (i.e. an existing patent application) may arise, thereby complicating the granting of an actual patent.

13.2 Key Risk Mitigation

Cost overruns	Utilise past wave energy converter experience in construction and management processes: well-planned marine activities, local operator to minimise mobilisation and standby rates, sound understanding of meteorological conditions for the region. Employ a competitive bidding process.
Failure during sea tow	Built in water tight segmented buoyancy chambers with sufficient damage stability allowance as per DNV. Charter of experienced ocean tow operator, with redundancy in options, voyage plan with safe havens, local knowledge of chartered region, and sound understanding of historical data for weather windows in region. It is also worth noting that WSE personnel have extensive experience in the successful deployment and retrieval of very similar wave energy structures on numerous previous occasions. This experience will prove invaluable in mitigating the risk associated with the sea tow.
Geotechnical	Surveys to understand seabed characterisation and select a candidate site, geotechnical consultants to review data to analyse, evaluate and develop an engineered solution etc.
Access for O&M	The Wave Swell Energy technology involves no moving parts in or below the water. This means access to the only components requiring maintenance is relatively cheap and simple.
Survivability In-Service	With no moving parts in the water, the Wave Swell Energy technology has a natural advantage in terms of survivability in extreme storm conditions. It is deployed in depths of 5.75 metres, which ensures the maximum wave height is limited to approximately 6 metres. This results in clearly defined maximum wave load conditions which are understood in the design process. Wave Swell Energy will also ensure geotechnical conditions are well investigated and understood, the appropriate safety factors are allocated to all structural elements and the appropriate safety factors are allocated for stability calculation.

Information About Investor Rights



14 Information About Investor Rights

14.1 Annual General Meetings

The Company holds an annual general meeting ("AGM") each year. If shareholders have any queries or concerns about the Company, they should contact the company's COO, John Brown by email at john.brown@waveswellenergy.com.au.

14.2 Annual Report

The Company is required to prepare annual financial reports and directors' reports at the end of each financial year and lodge these with ASIC (within four months of the financial year end). The Company has a 30 June year end and its financial reports must be lodged by 31 October each year.

The directors of the Company are required to make a declaration that the financial statements give a true and fair view of the Company's financial position and performance and that the financial statements comply with the accounting standard.

The Company will distribute the audited annual report with its notice of Annual General Meeting.

15 Glossary of Terms

ASIC means the Australian Securities and Investments Commission, Australia's integrated corporate, markets, financial services and consumer credit regulator.

Company means Wave Swell Energy Limited ACN 615 293 724.

DNV Det Norske Veritas, a global quality assurance and risk management company.

kWh means a kilowatt hour which is a unit of measure for energy.

The Kyoto Protocol is an international treaty signed in 1997 that commits state parties to reduce greenhouse gas emissions.

Learning Curve Effects means the improvements in efficiency realised from acquiring new skills and knowledge.

MWh means megawatt hour, a unit of measure for energy equal to 1,000 kilowatts.

Offer means an offer of fully-paid ordinary shares by the Company.

The Paris Agreement is an international agreement within the United Nations Framework Convention on Climate Change, dealing with greenhouse gas emissions mitigation, adaptation and finance.

Power Purchase Agreement ("PPA") means a legal contract between an electricity provider and a power purchaser.

Oscillating Water Column ("OWC") means the generic term for the technology behind UniWave™.

Wave Swell Energy means Wave Swell Energy Limited.

16 Annexures:

Supporting letters for King Island project, international project interest and Wave Swell Energy technology.

16.1 Letter from Hydro Tasmania

Hydro Tasmania

15 May 2018

Dr Tom Denniss
Wave Swell Energy Ltd
Level 13, 41 Exhibition Street
MELBOURNE VIC 3000

Dear Dr Denniss

Wave Swell Energy Ltd - Letter for ARENA Grant Application

This letter confirms Hydro Tasmania's enthusiasm for the wave-to-energy project that Wave Swell Energy is proposing for King Island.

As a world leader in the integration of renewable energy into small island grids, Hydro Tasmania welcomes the opportunity to include wave energy among its sources of generation. The reliable and predictable nature of wave energy, coupled with the fact it is essentially uncorrelated with wind and solar energy, will enhance the ability of the King Island Renewable Energy Integration Project (KIREIP) to provide a greater proportion of the island's energy from renewables and, consequently, a reduction in the use of diesel fuel.

The inclusion of the Wave Swell Energy project into the KIREIP microgrid will afford Hydro Tasmania the distinction of being the first utility in the world to incorporate wind, wave, and solar into its renewable mix. The experience and knowledge gained will ensure Hydro Tasmania remains at the forefront as a world leader in the integration of renewable energy into both small and large electrical grids. This accords well with the organisation's focus on hybrid energy solutions for remote islands throughout Australia and the Pacific, and the commercial opportunities it provides.

Hydro Tasmania's support for the Wave Swell Energy project includes providing the land based grid connection infrastructure as part of our PPA with Wave Swell Energy, which is currently being finalised, and mirrors the similar enthusiasm received from both the King Island Council and the island community in general.

We are excited to be a partner in the development of this world leading and highly innovative technology.

Yours sincerely

Steve Davy
CEO

4 Elizabeth Street Hobart TAS 7000 | GPO Box 355 Hobart TAS 7001 Australia
t 1300 360 441 | f +61 3 6230 5363 | e contactus@hydro.com.au | w www.hydro.com.au
Hydro-Electric Corporation | ABN 48 072 377 158

16.2 Letter from King Island Council

King Island Council

Our Ref:

Enquiries: D Laugher

3 January 2017

Mr John Brown
Chief Operating
Officer Wave Swell
Energy
Barrack House
Level 5, 16-20 Barrack Street
Sydney
NSW 2000

E-mail: john.brown@waveswellenergy.com.au

Dear Sir,

Thank you for taking the time late last year to meet with us to outline your plans and proposals for a possible wave swell commercial operational trial using the synergies already in place with Hydro Tasmania on King Island.

The project certainly sounds exciting, and would appear to be very much in line with the renewable energy integration model that currently exists here. It is also pleasing to see that Hydro Tasmania have expressed a keen interest in working in partnership with you to explore options and capacity to make this energy form a further part of their network.

Whilst there will inevitably be some further work needed to get all of the necessary approvals in place, and to finalise any work required to “prove up” the preferred installation site, I look forward positively to this project joining the power supply system here on King Island.

There is a significant growth stimulus within our community at the moment, with enormous international attention focussed around golf tourism in particular. This growth element will, inevitably, bring with it increased energy consumption/supply demands, and meeting some of that requirement through an alternative source such as wave swell energy generation, is a very welcome addition to the investment “mix”.

I wish you well with your plans and look forward to seeing this project come to fruition.

Yours sincerely

Duncan McFie
MAYOR

16.3 Letter from University of Tasmania

UNIVERSITY *of* TASMANIA | AMC Australian Maritime College

20 December 2016

To whom it may concern

The respective teams at Wave Swell Energy (Wave Swell Energy) and the marine renewable energy research group at the Australian Maritime College (AMC), a specialist institute of the University of Tasmania, have proactively collaborated for over a decade. During this period the Wave Swell Energy technology has been extensively tested and optimised by performing many comprehensive series of physical scale model experiments in the AMC ocean wave basin at Launceston, Tasmania. The most recent test session was performed in early September 2016. This included a comparison of the company's innovative new unidirectional OWC valve system with a standard non-valve bidirectional OWC system.

The results of the testing of the Wave Swell Energy technology and the subsequent analysis of these results in Sydney indicate the valve system increases the output of the technology (all other things being equal) by approximately 17%. In addition, earlier testing by AMC on the same OWC geometry indicates that a surface piercing lip entry to the OWC increases the output by approximately 20% compared to the simple entry geometry employed in most previous OWC technologies. When operating concurrently, these two innovations result in acombined improvement of around 40%.

These latest experiments provide conclusive proof of concept for the new unidirectional OWC valve system, which results in further benefits by permitting the adoption of a unidirectional turbine. The company's own estimates for the increased efficiency of its new unidirectional turbine, compared to a bidirectional turbine - a reportedly conservative 14% - would, with all three innovations employed together, result in a compounded improvement in output of approximately 60% over that of previous bidirectional OWC systems.

Preparations are presently underway for a further series of physical model experiments to be performed early in 2017 that incorporate each of the latest improvements in the design of Wave Swell Energy's first commercial-scale device that will be deployed in southern Australia.

Our long-term collaboration has benefited both parties: not only has it resulted in significant advancement in Wave Swell Energy's technology, but also many other achievements, such as the development of novel measurement and experimental techniques. These successes have been recognised in the scientific community through peer- reviewed articles co-authored by key AMC and Wave Swell Energy personnel, including Chief Executive Officer Dr Tom Denniss, and Chief Technology Officer Scott Hunter. For example, our joint work has been published/presented in the following prestigious international scientific journals and conferences: *Journal of Ocean*

Engineering; *Journal of Offshore Mechanics and Arctic Engineering*; *Journal of Ocean Technology*; *Journal of Engineering for the Maritime Environment*, *Proceedings of the ASME 30th International Conference on Ocean, Offshore and Arctic Engineering*, and *Proceedings of the 18th Australasian Fluid Mechanics Conference*.

Finally, I personally have had the relatively unique experience of having direct involvement in assessing the performance of a large number and wide range of different marine renewable energy technologies, including over 12 different ocean wave energy devices from around the world. There is no question in my mind that Wave Swell Energy's technology is among the best, if not the best, in all key operational aspects such as efficiency, performance and survivability.

Please do not hesitate to contact me on +61 (0)419 543 918 or email gregorm@amc.edu.au should you wish any further information.

Yours sincerely

Associate Professor Gregor Macfarlane Manager, AMC

Towing Tank and Model Test Basin

16.4 Letter from Hawaii

HOUSE OF REPRESENTATIVES

STATE OF HAWAII
STATE CAPITOL
HONOLULU, HAWAII 96813

January 26, 2018

Consul General Jane Hardy
Australian Consulate-General
1000 Bishop Street
Penthouse
Honolulu HI 96813

Dear Consul General Hardy:

I enjoyed meeting and speaking with you at the reception after Governor Ige's State of the State address this week.

Following our discussion, I'm including information about Dr. Tom Denniss, chief executive officer of Wave Swell Energy. WSE is an unlisted Australian public company that developed a proprietary technology to convert ocean wave energy into clean, emissions-free electricity.

This is interesting to me because of my high prioritization of wave and renewable energy for Hawaii. As a continuing partner of nearly 30 years with Kaneohe Marine Corps Base Hawaii, we successfully implemented the state's first wave-energy converter and wave hub on-site. Dr. Denniss is interested in bringing WSE to Hawaii's waters and I have provided contacts for him.

Dr. Denniss' company is currently developing a wave energy project for installation in the ocean off the west coast of King Island between Tasmania and the Australian mainland. WSE wants to establish the world's lowest-cost renewable energy within five years and apply its technology toward the global requirement for cheap, clean green energy, with Australia playing a key role.

WSE is collaborating with Hydro Tasmania and the King Island Council; recently appeared in the *Sydney Morning Herald* and *The Age* in Melbourne; and received praise from Nobel Prize-winning scientist Professor Peter Doherty. Dr. Denniss' contact information is Tom.denniss@waveswellenergy.com.au and +61 410 612 472.

With warm aloha,

Cynthia

Representative Cynthia Thielen
50st District (Kailua, Kaneohe Bay)

CT:jb


wave swell energy