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**Submission to the House Standing Committee on Industry and Resources
Inquiry into the development of a non-fossil fuel energy industry in Australia: case study
into selected renewable energy sectors**

Wave and Tidal Energy in Australia

Australia benefits from an internationally cost-competitive skilled work force, and world-class R&D facilities. Renewable energy sources in Australia are abundant, and can be exploited with a shift in resource allocation and a re-channelling of some of this work force into the renewable energy industry. While fossil fuels will continue to provide the bulk of Australia's energy needs, renewable sources can start to take up the growing demand.

Australia is an island continent, surrounded by ocean. The coastal waters, in many locations, are rich in wave and/or in-stream tidal current energy. Wave energy can be converted to useable power or potable water by distributing devices in the coastal zone, near to populated regions. In-stream tidal current power is economically viable only where currents are enhanced by the local topography, such as islands and channels. Streamlined devices can be deployed in the currents to extract useable power. There are many locations in Australia where wave and tidal power could be economically exploited.

BioPower Systems Pty. Ltd. is developing innovative technologies that harness ocean waves and tidal currents for conversion into clean renewable energy. These systems have a minimal environmental footprint, are designed to survive in the marine environment, and are completely out of public view. Deployment of these systems would provide a cost-effective multi-MW clean power source without disturbance to habitats or on-land communities. Development, fabrication and deployment of devices would create hundreds of jobs and provide both domestic and export opportunities.

Over the past year we have become actively involved in the Aoretoa Wave and Tidal Energy Association (AWATEA) based in NZ, and are inspired by the groundswell of support and activity that is occurring within NZ. It is our intention to build our business in Australia, using Australia's skill-base, and to benefit from close alliances in NZ. We therefore support the submission by AWATEA, and would be pleased to provide further information about our technologies, the ocean energy industry, the potential for exploitation of these resources in Australia and NZ, and the government support required to make Australia a world-leader in ocean energy technology and uptake.

With the right technologies, the unlimited power in the oceans can be unlocked for use by land-based communities and industries. Government support will be required to lift the fledgling industry off its feet. As outlined in the submission by AWATEA, New Zealand is already initiating government support schemes. In addition to the present grant schemes in Australia, further support in the form of tax incentives, feed-in tariffs, or subsidies for power projects could accelerate the development of our ocean energy industry.

Dr. Timothy Finnigan
Founder and CEO