

## ASX Announcement

23 February 2017

### \$19.5 million commitment for Albany Wave Farm

**Carnegie Clean Energy Limited (ASX: CCE), owner and developer of the CETO wave energy technology, is pleased to advise that the Western Australian State Labor party has committed \$19.5 million to fund a Wave Project and Centre of Excellence in Albany, Western Australia, should they be elected on 11 March.**

The Project will be the first commercial scale wave farm in Australia and will demonstrate the potential for WA and Australia to tap into a highly consistent renewable resource; delivering 24/7 clean power into the electrical grid at a time where recognition of the importance of reliable, clean energy in Australia has never been higher. The Project, to be delivered in stages, will involve an initial 1MW unit followed by a 20MW wave farm resulting in over \$100m of local investment. Successful demonstration of the 20MW farm could in turn lead to a 100MW expansion.

Carnegie's Managing Director, Dr Michael Ottaviano, commented:

"It's time for Australia to embrace the potential of wave energy. It is well understood that our wave resource is the best in the world. It is essential that we take advantage of this resource and the world-leading capability and technology that exists in companies like Carnegie. Wave energy justifiably demands the sort of investment that other power technologies, whether fossil fuel or renewable, have benefited from. Unlike other power technologies where Australia has become a "technology taker", wave has the potential to build an industry we can commercialise locally and export globally."



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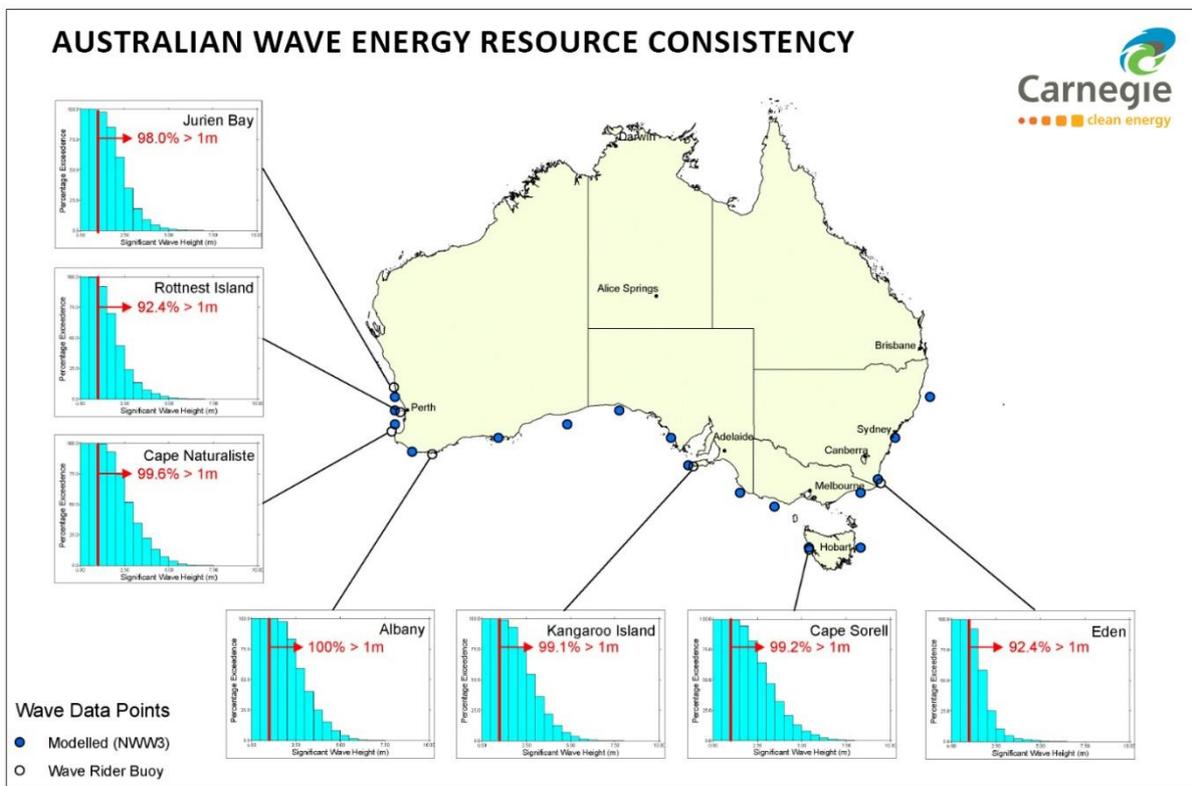
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The Albany wave farm has the potential to unlock Australia’s world class wave resource – extending from New South Wales, Victoria, Tasmania, South Australia and through to Western Australia – to supply clean, reliable renewable energy which is complementary to solar and wind energy projects. West Australia’s wave resource is estimated at 10,000MW or approximately twice the current West Australian electricity capacity (RPS, 2010) and Australia’s total potential wave resource is some five times the installed power capacity of the country (CSIRO, 2011).

The consistency of the swell off the southern coastline of Australia means wave energy has a major role to play as our energy mix transitions to one dominated by renewables. Albany has one of the most consistent wave energy resources in the world, experiencing greater than 1m swell 100% of the time. The integration of this 24/7 wave resource with the regions existing infrastructure, including the existing wind farm, will provide more stable, consistent and reliable renewable energy to the Western Australian electricity grid.

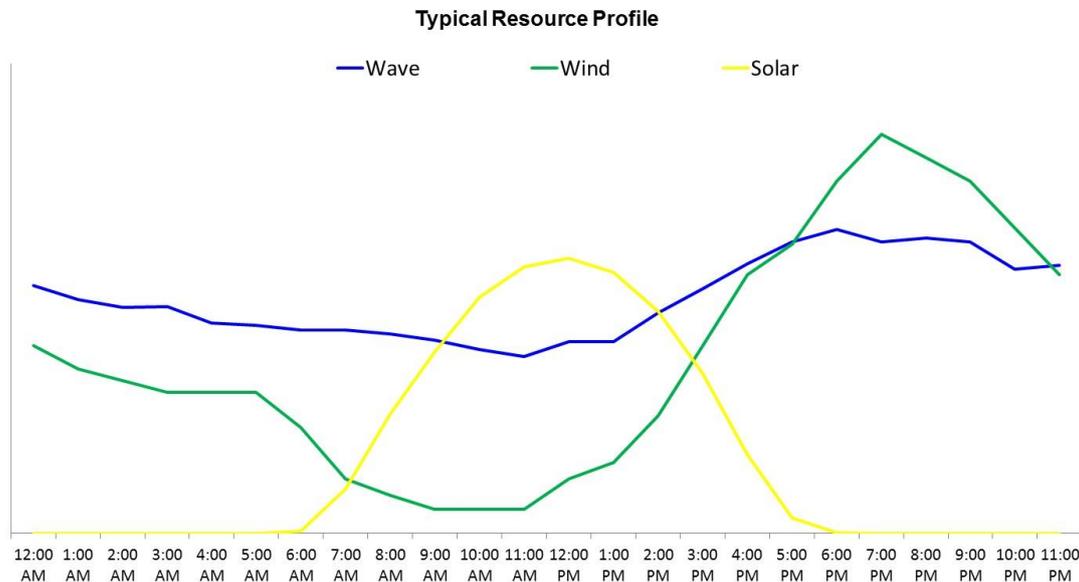


Source: RPS MetOcean, 2010

Dr Michael Ottaviano, added:

“There is no doubt that the future of energy, both in Australia and internationally, will involve the combination of renewable energy technologies and storage solutions in large scale renewable hybrid projects and smaller scale microgrids. The combination of solar, wind, wave and energy storage offers the solution to the energy trilemma of the decarbonising of our electricity systems in a cost effective way whilst maintaining reliable power supply. Carnegie

is uniquely positioned as the owner and developer of integrated renewable energy solutions and has an unparalleled track record in the delivery of renewable microgrid projects.”

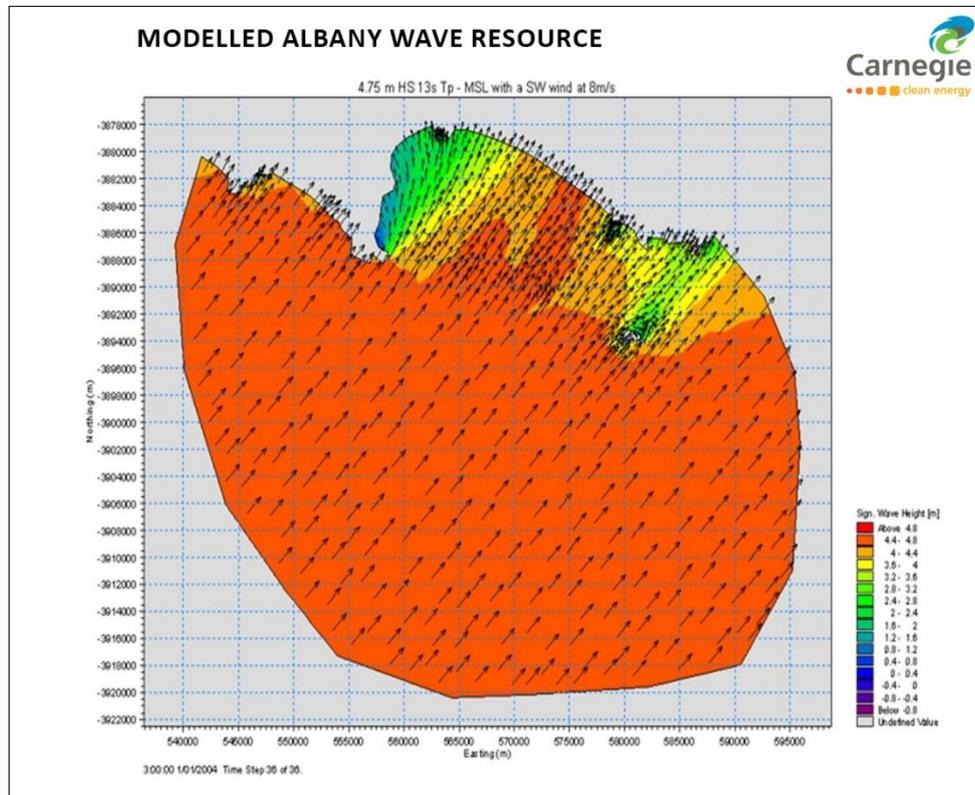


The Albany Project also represents an opportunity for Australia to develop world leading industrial capacity in the design and development of wave projects. Carnegie’s wave energy team and its CETO wave technology are already recognised as a world leader. The United Kingdom and Europe have made significant investment in the ocean energy sector and the United States recently announced the development of a wave energy test centre off Oregon.

Carnegie has been working on plans for a wave farm in Albany for nearly a decade and has spent over \$1million on studies, surveys and designs for the region, including site assessment, wave resource mapping, licensing and site design. Carnegie has a site license for its proposed Albany wave farm, offshore from Torbay and Sandpatch. The project will move through a structured design and development process, including full consideration of environment, Native Title and planning.

As part of the Project, further consultation will be undertaken with the local community, industry and other stakeholder groups, as well as further regulatory approvals sought including:

- Environmental approvals
- Planning consent (DAP)
- Grid connection approval



Source: GHD

Associated with Carnegie's Albany Wave Project is the establishment of the Wave Energy Centre of Excellence in collaboration with the University of Western Australia's Oceans Institute and Albany Campus. The Centre of Excellence will draw together the capabilities of Carnegie's world leading CETO technology and existing Australian and international research relationships. The local Western Australian investment will apply WA's existing unique offshore energy capability to the development of a wave energy industry, creating domestic and export opportunities.

Carnegie has an existing research project portfolio representing over \$10 million of wave energy research projects with leading local and global research institutions; including the University of Western Australia, Curtin University, Murdoch University, the CSIRO, Swinburne University, University of Adelaide and international institutions including Wave Energy Scotland, University of Edinburgh, Plymouth University in the UK and University College Cork in Ireland.

### **About Carnegie Clean Energy Limited**

[Carnegie Clean Energy Limited](#) is an Australian, ASX-listed (ASX: CCE) wave energy technology developer and solar/battery microgrid project developer. Carnegie is the 100% owner and developer of the CETO Wave Energy Technology intellectual property and is also 100% owner of leading Australian battery/solar microgrid Engineering Procurement and Construction (EPC) company Energy Made Clean (EMC). EMC specialises in the delivery of mixed renewable energy microgrid projects to islands and remote and fringe of grid communities. Carnegie is the only company in the world to offer a combination of wave, solar, wind, storage and desalination via microgrids which are ideally suited to islands, off grid communities and fringe of grid locations.

#### **For more information:**

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