

ASX Announcement

6 October 2017

Carnegie Clean Energy wins \$16 million grant from WA Government for Albany Wave Energy Project

- Carnegie Clean Energy Limited (ASX: CCE) wins \$15,750,000 in Western Australian Government's competitive tender to deliver a Wave Energy Project at Albany.
- An additional \$3.75m has been awarded to the University of Western Australia to establish an associated national Wave Energy Research Centre co located in Albany, WA
- The Australian Renewable Energy Agency (ARENA) Board has conditionally approved the transfer of Carnegie's \$11.7m undrawn CETO 6 Project funding from Garden Island to Albany subject to the signing of the detailed documentation.
- Carnegie will commence work on the Project immediately with upcoming activities to include project design, wave buoy deployment, site surveys, community consultation and approvals.

The Western Australian Government's Department of Primary Industries and Regional Development has awarded \$15.75m grant funding to Carnegie's CETO technology and Albany Wave Energy Project following the completion of a globally competitive tender process for wave energy developers that attracted submissions from around the globe.

In addition, the WA Government has awarded \$3.75 million to the University of Western Australia to establish and manage an associated Wave Energy Research Centre in Albany, Western Australia. The Wave Energy Research Centre will elevate Western Australia to the forefront of offshore renewable energy research and technology and bring together more than 30 researchers to support Carnegie's ongoing research into wave, tidal and offshore wind energy.

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

"Carnegie is delighted to be chosen as the recipient of the WA government grant to establish the Albany Wave Energy Project. With wave energy, we have the potential to take advantage of our local technology and resource advantage to build an industry we can commercialise and export globally. Having a globally recognised Wave Energy Research Centre in Western Australia will also attract national and international interest from research and industry participants."

In parallel, the Australian Renewable Energy Agency (ARENA) Board has conditionally approved Carnegie's request to move ARENA's CETO 6 Project funding from Garden Island to Albany, subject to the signing of the detailed documentation. Accordingly, the remaining \$11.7m grant funding from ARENA's CETO 6 Project funding will also be available to deliver the Albany Wave Energy Project. Carnegie will continue to use its Garden Island site for its own wave energy research and prototype testing as well as working with other wave energy developers at the site.

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The Albany Wave Energy Project will involve the design, manufacture and install of a CETO 6 unit in Carnegie's existing licence area offshore from Torbay and Sandpatch in Albany during the 2019/2020 summer weather window.

In addition to demonstrating Carnegie's WA developed and owned technology, the Project will also deliver common user infrastructure at the Albany site which Carnegie will make available for other wave energy industry developers once the CETO 6 project is complete.

The Albany Wave Energy Project

Carnegie has been working on plans for a wave farm in Albany for over 5 years with activities including site studies, surveys, wave resource mapping, licensing and site design. Now that the Albany Wave Energy Project has secured WA State funding, and conditionally transferred the existing ARENA CETO 6 Project funding, Carnegie will immediately commence the project design and development process, including consideration of environment, Native Title, planning consent and grid connection studies and approvals. As part of the Project, further consultation will be undertaken with the local community, industry and other stakeholder groups.

The project aims to demonstrate Carnegie's commercial prototype, the CETO 6 unit, as well as 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 when recognition of the importance of reliable, clean energy in Australia has never been higher. The initial project phase involves delivery of a 1MW CETO 6 unit. Carnegie plans to follow this initial stage with a 20MW expansion which in could in turn lead to a 100MW CETO wave farm at the site. Further details of the latest CETO 6 design will be released in the coming weeks.

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 leading.

Wave Energy Research Centre

Associated with Carnegie's Albany Wave Project is the establishment of the national Wave Energy Research Centre to be run by the University of Western Australia's Oceans Institute and UWA's Albany Campus. 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 will play a significant role in the Wave Energy Research Centre through close collaboration with UWA and all of the Research Centre partners. This will include sharing the Project's site-specific surveys and common user data. In addition, Carnegie intends to transfer the common user infrastructure to the State following the completion of the Project's operational period. Carnegie will also be working with the Research Centre to facilitate access for industry partners to Carnegie's wave energy research facility in North Fremantle and Carnegie's Garden Island demonstration site.

Carnegie will also provide value to the Research Centre through its existing research project portfolio representing over \$11 million of wave energy research projects with leading local and global research

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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.

About Department of Primary Industries and Regional Development

The Department of Primary industries and Regional Development is committed to building vibrant regions with strong economies through jobs growth, economic growth and capable people. In partnership with the Regional Development Portfolio the Department is responsible for the effective planning, coordination and delivery of the State Government's regional development agenda. This includes the management of the Royalties for Regions investment program and maintaining effective relationships with key partners across government, industry and the community.

About ARENA

ARENA was established by the Australian Government to make renewable energy technologies more affordable and increase the supply of renewable energy in Australia. Through the provision of funding coupled with deep commercial and technical expertise, ARENA provides the support needed to accelerate the development of promising new solutions towards commercialisation. ARENA invests in renewable energy projects across the innovation chain and is committed to sharing knowledge and lessons learned from its portfolio of projects and information about renewable energy. ARENA always looks for at least matched funding from the projects it supports and to date has committed \$1.1 billion in funding to more than 270 projects. For more information, visit www.arena.gov.au

For more information:

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