ASX ANNOUNCEMENT
23 JANUARY 2023

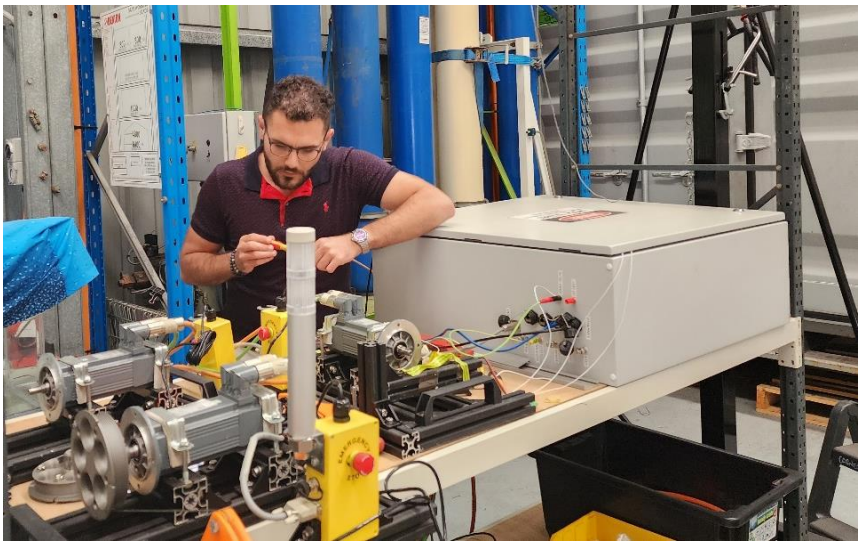
Carnegie and Hewlett Packard Enterprise extend Collaboration Agreement for another two years

Carnegie Clean Energy (ASX: CCE) ("Carnegie" or the "Company") is pleased to announce that it has extended its Collaboration Agreement with Hewlett Packard Enterprise Company (HPE), which is among the largest multinational Information technology firms globally and ranks within Fortune's top 150 of the largest U.S. companies[1]. The agreement between Carnegie and HPE is for an additional two years, to 15 November 2024. All other terms and conditions of the agreement remain in effect.

A key partner since 2020, Hewlett Packard Labs, the exploratory and advanced research group of HPE, and Carnegie have successfully worked on advanced control initiatives related to CETO, which is a wave-energy technology that converts kinetic energy from ocean swell into electrical power. The two organisations have made progress in boosting CETO's performance through the development of a Reinforcement Learning (RL) based controller. The work supports Carnegie's efforts to develop controllers that maximise the performance and cost effectiveness of the CETO technology, with the two companies building on the 20% power gains reached in the earlier phases of the collaboration.

Reinforcement learning is an area of artificial intelligence in which a machine learning model is built with the ability to self-learn. The RL controller has the ability to directly learn and apply the optimum response to predicted waves, during operation.

Through the continued collaboration, the team will test the Reinforcement Learning (RL) based Controller in a tank testing campaign at the Cantabria Coastal and Ocean Basin (CCOB) in March 2023. This tank testing campaign is an important activity being delivered as part of CETO Wave Energy Ireland's EuropeWave PCP Phase 2 Project (contract value of €600k / A$890k).

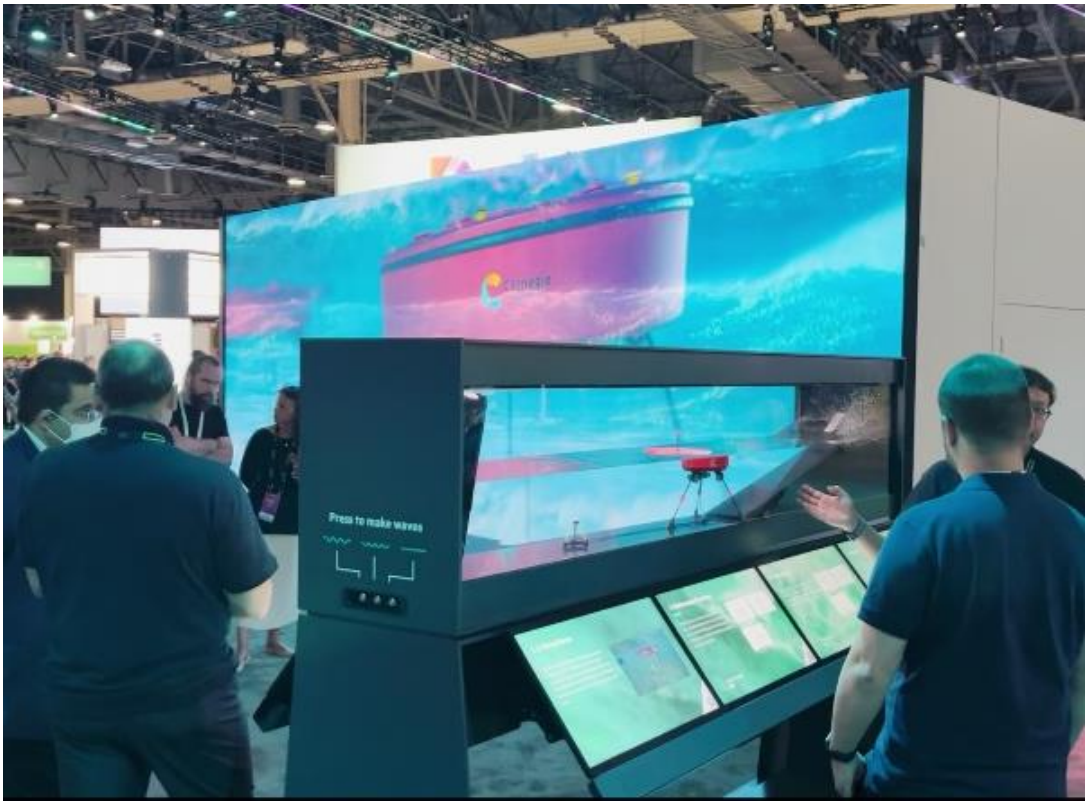


CETO Wave Energy Ireland Engineer preparing tank testing equipment

[1] HPE was ranked No. 123 on the 68th edition of Fortune's annual ranking of America's 500 largest companies for 2022: https://fortune.com/company/hewlett-packard-enterprise/fortune500/

21 North Mole Drive, North Fremantle WA 6159 | PO Box 39, North Fremantle WA 6159
Phone: +61 8 6168 8400 | www.carnegiece.com | ABN 69 009 237 736

The enhancements are the result of the two companies' combined capabilities – Carnegie's wave energy experience and Hewlett Packard Labs' expertise in applying reinforcement learning to real-world problems. HPE has supported and exhibited the RL enhanced CETO technology at international industry conferences - ISC High Performance 2022 in Hamburg, and HPE Discover 2022 in Las Vegas, with encouraging reception.



CETO on display at HPE Discover 2022 (image credit: HPE)

Carnegie's CEO, Mr Jonathan Fiévez, commented: *"We are very pleased to be continuing our collaboration with HPE and carrying on these exciting innovations in the wave energy space. Our teams have made great strides over the past two years integrating reinforcement learning-based Artificial Intelligence into our control strategies, allowing CETO to optimally extract more energy from each wave.*

The work conducted so far has improved the performance and reduced the cost of the CETO technology and revolutionised the control of wave energy converters. Over the next few years, we look forward to validating the RL controller through upcoming tank testing and ultimately via the use of the controller in an operating CETO prototype.

Strategic partnerships as with HPE support the validation of our technology and progress the commercialisation of wave energy as a commercially competitive and widely adopted renewable energy."

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This announcement has been authorised by the Company Secretary and CEO.

For more information

Carnegie Clean Energy Limited
+61 8 6168 8400
enquiries@carnegiece.com
www.carnegiece.com

About Carnegie and CETO Wave Energy Ireland

Carnegie Clean Energy (ASX: CCE) is a technology developer focused on delivering ocean energy technologies to make the world more sustainable. CETO Wave Energy Ireland is a wholly owned subsidiary of Carnegie Clean Energy. Carnegie is the owner and developer of the CETO and MoorPower technologies, which capture energy from ocean waves and convert it into electricity. Using the latest advances in artificial intelligence and electric machines, Carnegie can optimally control our technologies and generate electricity in the most efficient way possible. The company has a long history in ocean energy with a track record of world leading developments.

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