

BOARD OF DIRECTORS & CEO

Non-Executive Chairman
Terry Stinson

Non-Executive Director
Grant Mooney

Non-Executive Director
Michael Fitzpatrick

Non-Executive Director
Anthony Shields

Chief Executive Officer
Jonathan Fievez

CONTACT DETAILS

www.carnegiece.com

enquiries@carnegiece.com

+61 8 6168 8400

21 North Mole Drive
North Fremantle WA 6159

PO Box 39
North Fremantle WA 6159

QUARTER HIGHLIGHTS

- MoorPower demonstrator successfully deployed in North Fremantle, supporting validation of Carnegie's new MoorPower wave energy converter product which can support offshore operations by reducing reliance on diesel generators, cutting carbon emissions, minimising risk, and lowering energy costs
- Carnegie Clean Energy selected as a Technical Support Recipient in the U.S. TEAMER program, securing support worth USD\$95k for collaboration with NREL on extreme wave energy modelling
- Carnegie subsidiary CETO Wave Energy Ireland, awarded funding to participate in the WECHULL+ Project, providing technical expertise in the development of a novel concrete material for wave energy converters. Funding awarded from Sustainable Energy Authority Ireland (SEAI) as part of the European Clean Energy Transition Partnership (CETP)

Carnegie's CEO, Mr Jonathan Fievez, commented on the Quarter:

"Our dedicated team has been busy delivering progress on both CETO and MoorPower wave energy technologies this quarter.

CETO development continues under the ACHIEVE programme heading toward a deployment next year in the Basque Country, Spain. We're engaging on a daily basis with both local and global suppliers to finalise designs and secure manufacture of the key components.

In Australia, it was great to see the successful deployment of the MoorPower Scaled Demonstrator at our North Fremantle test site. MoorPower offers offshore operations the benefit of onboard electricity generation from wave energy, diminishing reliance on diesel generators. The Demonstrator will validate the performance of MoorPower for future customers.

Securing funding for the WECHULL+ Project and selection in the U.S. TEAMER program demonstrates our ongoing dedication to pushing the boundaries of technology. These projects are critical the pipeline of innovations that can deliver the performance enhancement and cost reduction for future CETO generations."

<p>Who is Carnegie?</p>		<p>Carnegie develops ocean energy technologies to make the world more sustainable. We provide advanced and competitive wave energy products for global renewable energy markets. Waves are an untapped renewable energy source that is consistent, predictable, and globally distributed. The scale of the opportunity is significant, Ocean Energy Europe (OEE) forecasts significant growth for wave energy with a €653b market potential by 2050.</p>
<p>Core Products</p>	<p>CETO</p>	<p>CETO is a submerged buoy harnessing energy from ocean waves. Sitting a few meters below the surface of the ocean, CETO converts wave energy into zero-emission electricity. This clean and predictable energy supply can be harnessed to provide a reliable energy source 24/7. The CETO technology is continually improving through cost reduction measures and increasing the energy supply capacity intelligent innovation.</p>
	<p>MoorPower</p>	<p>MoorPower is a wave energy product for offshore demand applications. A spin-off from the CETO technology, MoorPower provides power for offshore moored vessels, such as feed and lighting barges used in Aquaculture. MoorPower can replace and reduce diesel generator usage in offshore environments, reducing risk and carbon emissions.</p>

PRODUCTS

In the last quarter, the company achieved significant milestones, with particularly notable achievements related to the testing and commissioning of the MoorPower system, leading to the successful deployment of the MoorPower demonstrator in January 2024. In parallel, the team continued progressing the ACHIEVE Programme, working towards deployment of CETO in Spain in 2025, aligned with the EuropeWave contract and RENMARINAS DEMOS funding previously announced. The CETO and MoorPower activities delivered during the quarter continue moving these technologies forwards along their commercialisation journeys. These efforts contribute to strengthening the commercial pathway for both MoorPower and CETO.

MoorPower

During the quarter Carnegie made substantial progress in the development and deployment of MoorPower, an innovative wave converter system designed to meet the growing demand for clean and reliable energy in offshore operations, particularly within the aquaculture sector. Recognising the challenges posed by diesel generators, including high costs, environmental risks, and carbon emissions, Carnegie responded to industry needs with this new product, MoorPower. Harnessing the fundamental principles of CETO technology, the company designed MoorPower for offshore energy demand applications, with an initial focus on aquaculture barges and vessels operating in remote offshore locations.

The Blue Economy CRC supported MoorPower scaled demonstrator project advanced through onshore testing and validation of the power take-off (PTO) units during the quarter, marking a critical phase in ensuring the reliability and functionality of the technology before offshore deployment. Rigorous testing included assessments of control system behaviours and transitions between modes.

Subsequent to the quarter end, the MoorPower demonstrator was deployed offshore in North Fremantle, Western Australia, just offshore from Carnegie’s headquarters.



MoorPower in operation at the offshore test site in North Fremantle, WA

The successful deployment and initiation of operations of Carnegie's MoorPower represents a significant milestone in advancing the decarbonisation of offshore operations, demonstrating MoorPower's potential to reduce reliance on fossil fuels, lower carbon emissions, minimise risk, and drive down costs. The deployment has been supported by the Blue Economy CRC and has been delivered in collaboration with industry partners such as Huon Aquaculture and Tassal Group and a range of additional expert partners. The demonstrator helps position MoorPower as a viable solution for clean sustainable energy in offshore industries, support progress toward net-zero goals.



CETO

Progressing Carnegie’s core wave energy converter technology CETO towards its deployment in Spain next year was also a core focus of the Company during the quarter.

Through the quarter, the team delivered planned activities of the ACHIEVE Programme, taking critical steps to advance towards the 2025 deployment of CETO at the Biscay Marine Energy Platform (BiMEP) in the Basque Country.

The ACHIEVE Programme is an initiative being delivered by Carnegie’s subsidiaries CETO Wave Energy Ireland under contract by EuropeWave Buyers Group (ACHIEVE Project) and Carnegie Technologies Spain with the support of funding awarded by the Spanish Government through the RENMARINAS Demos Programme (AGUAMARINA Project). Through this collaborative initiative, Carnegie will be deploying and operating a CETO prototype in Europe commencing in 2025, marking a key step on the technology’s commercialisation pathway.

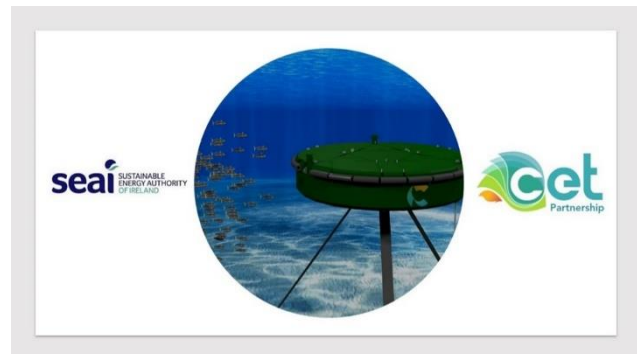
Some of the recent EuropeWave ACHIEVE activities have focused on building relationships with key suppliers and stakeholders and progressing procurement related to critical CETO components. These early-stage relationships strengthen the commercial viability of CETO as supply chains are established and lessons learned can be applied to future commercial projects.

With the addition of funding through the Spanish Government’s RENMARINAS DEMOS program, announced in September 2023, additional activities funded through Carnegie Technologies Spain’s AGUAMARINA Project are now underway. This additional funding is extending and enhancing the ACHIEVE activities, including providing an extended CETO operational period at BiMEP and supporting enhanced wave prediction capabilities, local infrastructure, local knowledge and local operations and maintenance.

RECENT CETO RESEARCH AND DEVELOPMENT FUNDING AWARDS

WECHULL+

Carnegie Clean Energy's subsidiary, CETO Wave Energy Ireland (CWEI), has been awarded £45k as an industry partner in the WECHULL+ Project. The project aims to investigate and test a novel concrete material for wave energy converters, focusing on minimising environmental impact, increasing production availability, and reducing costs. CWEI’s funding was provided by the Sustainable Energy Authority Ireland (SEAI) as part of the European Clean Energy Transition Partnership (CETP).



As a wave energy converter use case, CWEI’s involvement in the WECHULL+ Project provides an opportunity to develop a valuable alternative material for wave energy technologies like CETO. CWEI will contribute technical expertise and advice based on the application of these materials to CETO technology. The project will be delivered by a European consortium, led by the Research Institute of Sweden (RISE), with the participation of various technical and research partners. The focus of the project is to minimise the impact of materials on the environment, improve the availability of wave energy converter hull manufacturing, advance the scaling-up of wave energy converter production, and reduce costs. The funding received by CWEI will support the research and development of the novel concrete material for wave energy converter hulls. The project aligns with Carnegie Clean Energy’s commitment to innovation and the development of sustainable wave energy technologies. CWEI’s participation in the project will enhance the understanding of alternative materials for future deployments of CETO technology.

TEAMER

Carnegie Clean Energy has secured support through the US Testing Expertise and Access to Marine Energy Research (TEAMER) program. The company was selected as a Technical Support Recipient, and the project has been granted \$95,000 USD to facilitate a collaboration with the National Renewable Energy Laboratory (NREL), a national laboratory of the US Department of Energy.

The joint effort harnesses the combined expertise of Carnegie and NREL in conducting advanced computational fluid dynamics (CFD) modelling. Specifically, the project focuses on predicting accurate loads associated with extreme wave events, a critical aspect for ensuring the survivability of wave energy converters. The collaboration is expected to yield reliable load predictions for extreme wave events, contributing to risk reduction in future CETO deployments.

This strategic partnership with NREL offers Carnegie an opportunity to leverage the extensive modelling and testing expertise of the US Department of Energy's national laboratory. This work is an important part of Carnegie's efforts to enhance the survivability of wave energy converters under extreme conditions. CETO is built with survivability front of mind and this work will enhance its resilience under the ocean's more extreme conditions. With high confidence in the modelling of extreme wave conditions, Carnegie can further optimise the technology and continue lowering the levelised cost of energy produced.

OTHER PRODUCTS

MoTWEC

During the quarter, progress has been made on the Mooring Tensioner for Wave Energy Converters (MoTWEC) project, which is backed by the Blue Economy CRC. The testing phase at Carnegie's onshore testing facility has included crucial assessments of the Mooring Tensioner components, designed to provide passive tension to the moorings of both CETO and MoorPower. After a period of maintenance, the Mooring Tensioner prototype is ready to recommence testing and will resume cycles at Carnegie's research facility.

Supporting the ongoing development of the Mooring Tensioner technology, additional Mooring Tensioner units have been successfully integrated into the Power Take-Off (PTO) unit recently deployed as part of the MoorPower Demonstrator project.

With a combination of Mooring Tensioner testing undertaken onshore (on the test rig) and testing undertaken offshore (as part of MoorPower), Carnegie will be gathering significant data and experience relevant to the use of the Mooring Tensioner for both CETO and MoorPower.

EVENTS

During the quarter, CETO Wave Energy Ireland Project Manager, Miguel Santos Herrán, presented key insights at the El foro sectorial de energía de las olas (The sectoral forum on energy of the waves) hosted by the Basque Energy Cluster. Miguel discussed the progress towards the deployment of CETO at BiMEP (BiMEP Biscay Marine Energy Platform) in the Basque Country. The presentation emphasised advancements supported by the EuropeWave Project and RENMARINAS DEMOS Funding opportunity.

The forum provided a valuable platform to share updates on the ACHIEVE Programme and contributed to discussions on clean energy, wave energy, and the sustainable future of the energy sector.



ACHIEVE Project Manager Miguel Santos-Herran presenting at El foro sectorial de energía de las olas

FINANCIAL NOTES

At the end of the Quarter, Carnegie had approximately \$2.35m in cash reserves. Careful management of company funds and assets continues so that progress is made with highly efficient use of capital. The Company remains debt free and in a solid position financially.

Note 6 to Appendix 4C:

Payments to related parties of the entity and their associates were made during the Quarter. In total, approximately \$75.3k was paid to Directors and associates for salaries, superannuation and contracted services.

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

For more information

Carnegie Clean Energy Limited

+61 8 6168 8400

enquiries@carnegiece.com

www.carnegiece.com

ABOUT CARNEGIE AND ITS SUBSIDIARIES

Carnegie Clean Energy (ASX: CCE) is a technology developer focused on delivering ocean energy technologies to make the world more sustainable. Carnegie Technologies Spain and 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. <https://www.carnegiece.com>

ABOUT EUROPEWAVE PRE-COMMERCIAL PROCUREMENT PROGRAMME



EuropeWave PCP is an innovative R&D programme for wave energy technology, which runs from 2022 to 2026. It will combine over €22.5m of national, regional and EU funding to drive a competitive Pre-Commercial Procurement (PCP) programme for wave energy.

Originally pioneered by the Wave Energy Scotland programme, the PCP model provides a structured approach, fostering greater openness, collaboration and sharing of risk between the public sector and technology developers. The programme will focus on the design, development, and demonstration of cost-effective wave energy converter (WEC) systems for electrical power production that can survive in the harsh ocean environment.

Match-funded by the EU's Horizon 2020 programme, it is a collaboration between Wave Energy Scotland (WES), the Basque Energy Agency (EVE) and Ocean Energy Europe (OEE). This collaboration is closely aligned with the decarbonisation, industrial and competitiveness objectives of the European Green Deal, and is part of a range of actions being taken to meet the European Commission's targets of 100MW of ocean energy by 2025 and at least 1GW by 2030.



This is part of the EuropeWave project that has received funding from the European Union's Horizon 2020 Research and Innovation Programme under grant agreement No 883751.

<https://www.europewave.eu/>

ABOUT RENMARINAS DEMOS

The RENMARINAS DEMOS Programme was established by Spain's Ministerio para la Transición Ecológica y el Reto Demográfico (Ministry for Ecological Transition and the Demographic Challenge) to grant aid for investment in pilot projects, test platforms and port infrastructure for marine renewables. This was established within the framework of the European Union-funded Recovery, Transformation and Resilience Plan, Next Generation EU. The programme provides aid in the form of a non-refundable grant managed by IDAE, Instituto para la Diversificación y Ahorro de la Energía (Institute for Diversification and Energy Saving).



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ABOUT BLUE ECONOMY COOPERATIVE RESEARCH CENTER (CRC)

The Blue Economy Cooperative Research Centre (CRC) is established and supported under the Australian Government's CRC Program, grant number CRC-20180101. The CRC Program supports industry-led collaborations between industry, researchers and the community. With a 10-year life, the Blue Economy CRC brings together 44 industry, government, and research partners from ten countries with expertise in aquaculture, marine renewable energy, maritime engineering, environmental assessments and policy and regulation. Further information about the CRC Program is available at www.business.gov.au.



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