

## **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

- ACHIEVE Programme progressed with key design contract awards and procurement well underway
- Receipt of €251,100 (approximately \$411,500 AUD) EuropeWave contract payment for commitment of €1million in ACHIEVE procurement contracts for key CETO components
- New partnership with Lloyd's Register to commence the certification process for CETO, providing independent verification and validation of the technology
- Delivered Keynote Presentation at the International Conference on Ocean Energy, held in Southern Hemisphere for first time
- CETO technology featured in the Wall Street journal and Australian Defence Journal: ENVOY
- New Carnegie subsidiary established in USA

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

"This quarter has been driven by strong collaboration and industry recognition, marked by significant progress across our key projects and a surge of positive momentum. We've seen advancements in the ACHIEVE Programme, with critical design contracts awarded and procurement of key CETO components well underway.

This progress has not only unlocked funding for the company through the EuropeWave milestone payment, but it also signifies the growing confidence in CETO's potential to deliver clean, reliable wave energy to Europe and beyond. With growing interest in wave energy across the globe, it is an opportune time to have an upcoming deployment.

The validation of the MoorPower technology though the Scaled Demonstrator project has given the Company strong justification to continue to commercialise the MoorPower modules. As we consolidate the lessons learned, we are looking to the next steps and future commercial deployment on a working aquaculture feed barge. We intend to work collaboratively with partners to make commercial deployment a reality.

Looking forward, Carnegie remains firmly dedicated to our vision of commercialising wave energy technologies to make the world more sustainable. I am confident that our continued emphasis on innovation, strategic partnerships, and industry engagement will continue to position Carnegie as a leader in the wave energy industry"

## **REPORT TO SHAREHOLDERS**

QUARTER ENDED 30 SETPEMBER 2024



Who is Carnegie?		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.
Core Products	СЕТО	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 through intelligent innovation.
	MoorPower	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.

### **PRODUCTS**

Carnegie has continued to progress the commercialisation pathways of its core technologies throughout the quarter. The testing phase of the MoorPower Scaled Demonstrator has completed and the team is finalising reporting and lessons learned, with progress towards commercial scale deployment becoming the priority. Following a successful testing regime, Carnegie's Mooring Tensioner for Wave Energy Converter (MoTWEC) project has completed its final cycles with final reporting being finalised. Progress continues in the ACHIEVE Programme, working towards Carnegie's planned 2025 deployment of CETO in the Basque Country, with the design phase nearing completion and procurement and manufacture of components ramping up.

#### Products – MoorPower

MoorPower is Carnegie's innovative wave energy converter system designed to provide a sustainable and reliable power source for a range of offshore applications, with a particular focus on aquaculture. As a scaled, surface-based adaptation of our proven CETO technology, MoorPower offers a compelling alternative to the diesel generators traditionally used to power offshore operations. By eliminating the need for fossil fuels, it significantly reduces carbon emissions and minimises the environmental impact associated diesel generator systems.





MoorPower in operation during the winter 2024 deployment phase.

The successful deployment of Carnegie's MoorPower Scaled Demonstrator in early 2024 has successfully progressed the commercialisation journey of the technology, providing an opportunity for our project partners as well as future potential customers to see the technology in action. The Scaled Demonstrator deployments provided critical data that has successfully validated the functional design and numerical modelling of the system in various sea conditions. The energy generation meeting the minimum criteria set out by the project to mitigate 50% of diesel consumption for onboard operations.



MoorPower Demonstrator Project Team

Following these successful deployment phases, the MoorPower Scaled Demonstrator has now been retrieved from the offshore test site in North Fremantle. Through the ongoing partnerships established through the Blue Economy CRC, Carnegie continues to progress the MoorPower technology through its commercialisation journey. The success achieved through the deployment of the MoorPower Demonstrator has provided the foundation for Carnegie to progress the technology to the next stage in this journey. Carnegie is actively working towards securing support to deliver the commercial scale deployment of the MoorPower modules onboard a working aquaculture feed barge.



#### **MoorPower Commercialisation Pathway**



Current status of the MoorPower Project commercialisation journey.

### **CETO: The ACHIEVE Programme**

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) and the Basque Government through a grant from the Ente Vasco de la Energia (ACHIEVE+ Project).



ACHIEVE Programme Schematic

Through this collaborative initiative, Carnegie will deploy and operate a CETO prototype at the Basque Marine Energy Platform (BiMEP) in the Basque Country, commencing in 2025. This will mark a key step on CETO's commercialisation pathway. The CETO Unit will operate for 2 years in this open ocean site



and the data collected will be used to validate the performance of the CETO technology and propel it along the commercialisation pathway.

The efforts of the quarter have been primarily focused on finalising the design activities and continued procurement of key components. Upcoming activities will include the continued engagement of stakeholders and the local supply chain, alongside receipt of detailed design reports for the manufacture of critical components, which will unlock further contract payments from EuropeWave.



Illustration of CETO deployment

## **Products - Mooring Tensioner**

The Blue Economy CRC funded Mooring Tensioner for Wave Energy Converters (MoTWEC) project has recently completed its final testing cycles. The MoTWEC Project tackles the cost and energy storage challenges of wave energy conversion through this novel Mooring Tensioner technology. This lightweight, durable energy storage component is a component that supports the use of rotary generators in Wave Energy Converters (WEC), significantly improving efficiency.

Following the successful testing campaign, Carnegie has continued the validation of this critical technology. The MoTWEC project has been incorporated on the 2024 deployment of the MoorPower modules as part of the Scaled Demonstrator project and will also be deployed at a larger scale during the ACHIEVE Programme deployment of CETO at BiMEP in 2025.

## **EVENTS**

Through the quarter Carnegie representatives appeared at a variety of industry and engagement events and our technology was featured in several media pieces including in The Wall Street Journal and the Australian Defence Journal: ENVOY.

Occurring in the Southern Hemisphere for the first time, the International Convention on Ocean energy (ICOE) provided a key opportunity to showcase the wave energy potential in Australia. Carnegie CEO Jonathan Fievez delivered a Keynote address, with Carnegie representatives also presenting on technical, social and commercial perspectives of the wider industry. Carnegie's presence in the ICOE Exhibition also provided key opportunities to engage with policymakers and industry on Carnegie's wave energy technologies and capabilities.











Image: Top Left: CEO Jonathan Fievez presenting a keynote address at ICOE, Top Right: Carnegie representatives at the ICOE exhibition stall, Bottom Left: Carnegie staff alongside the Australian Ambassador to Spain Rosemary Morris-Castico, Bottom Right: Carnegie representatives at the ORE4Citizens day engaging with the local community.

Carnegie was honoured to host the Australian Ambassador to Spain Rosemary Morris-Castico, during her visit to Bilbao. The Ambassador was keen to learn about the progress of the ACHIEVE Programme and ongoing collaboration with BiMEP. We are grateful for the ongoing support from the ambassador and for her continued interest in the ACHIEVE Programme.

Representatives of Carnegie Technologies Spain attended the ORE4Citizens day in Portugalete, Bizkaia (Basque Country). As a community event focused on connecting the offshore renewable sector with residents, it was a great opportunity to speak with local residents about CETO and its upcoming deployment at BiMEP in the Bay of Biscay.

#### **CORPORATE**

### **Notice of AGM**

The Annual General Meeting of the Company will be held at Swan Yacht Club, Riverside Road, East Fremantle WA 6158 on Tuesday, 19 November 2024 at 9:00 am (AWST). The company AGM is a great opportunity to engage directly with our leadership team, including the Board of Directors and Senior Management, and have your questions addressed. The Chairman's address and CEO presentation will discuss the Company's achievements over the last year including ACHIEVE Programme progression and MoorPower Demonstrator Project, alongside CETO complimentary technology advancement.



### **Annual Report**

Carnegie's Annual Report for the Financial Year 2024 is now available. The report offers a detailed account of our company's financial performance, strategic initiatives, and achievements over the past year. The Annual Report is available on the Carnegie Clean Energy website and all shareholders have been provided with print or digital access according to their communication preferences through our share registry, Automic Group.

We encourage shareholders to consider updating their communication preferences and consider the eco-friendly option of opting out of receiving a physical copy of our Annual Report and choosing the digital version instead. This simple choice reduces paper waste, saves company funds and enables you to access the report conveniently online. To opt for the digital version, please visit your Automic Group online platform and make the change through the preference section. Alternatively, you can contact Automic Group directly at 1300 288 664 (within Australia).

### **Carnegie Subsidiary Established**

Over recent years, the United States has taken an increasingly active interest in developing the ocean energy industry, with government investments in research, development and deployment activities and assets. With a significant wave energy resource and active government engagement, the US presents a growing market opportunity for Carnegie. Accordingly, Carnegie has established a US subsidiary, Carnegie Clean Energy LLC, within California to explore and pursue wave energy opportunities in the US.

## **FINANCIAL NOTES**

At the end of the Quarter, Carnegie had approximately \$2.445m in cash reserves.

Note 6 to Appendix 4C:

Payments to related parties of the entity and their associates were made during the Quarter. In total, approximately \$81k 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 optimally controls our technologies and generates 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 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.







#### **ABOUT EUROPEWAVE**



EuropeWave PCP is an innovative R&D programme for wave energy technology, which runs from 2022 to 2026. It combines 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, EuropeWave 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 2027 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).









## **ABOUT ENTE VASCO DE LA ENERGIA (EVE)**

The Ente Vasco de la Energía (EVE) is the Basque Country's energy agency, a public body established by the Basque Government. EVE serves as a central force in the region's energy sector, with a focus on the promotion of energy efficiency, the expansion of renewable energy sources, the development of sustainable energy policy, and the advancement of innovative energy technologies. The funding has been provided through the Grants programme for investment in the demonstration and validation of emerging marine renewable energy technologies 2023 to further support the ACHIEVE Programme.

