# **REPORT TO SHAREHOLDERS**

QUARTER ENDED 30 SEPTEMBER 2023



#### **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

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### QUARTER HIGHLIGHTS

- Contracts awarded to deploy CETO in Europe in 2025.
- €3.75m (\$6.3m) EuropeWave Phase 3 contract awarded to CETO Wave Energy Ireland's ACHIEVE Project to deliver and operate CETO wave energy technology in the waters off the Basque Country at the BiMEP wave energy test site.
- €1.2m (\$1.9m) grant awarded by Spanish Government to Carnegie's AGUAMARINA Project to enhance and extend the deployment of CETO through our ACHIEVE Programme.
- Belt testing undertaken, delivering important validation of the belt component CETO's rotary PTO through the IMPACT project at VGA s.r.l Italy.
- Extensive back-to-back testing of the MoorPower PTO units continues with positive results as the barge undergoes preparations for deployment.

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

"This quarter delivered significant wins that will see us deploy CETO technology in European waters; this brings the Company to a major inflection point. This success is a direct reflection of the hard work of the team and the commercial potential of our CETO technology and unlocks our pathway forward.

Being ranked #1 in EuropeWave competitive selection was a major achievement of the quarter, bolstered further by the RENMARINAS funding award only weeks later. These successes will enable our new ACHIEVE Programme to validate the CETO technology in European waters and will support our growing global partner ecosystem.

The ACHIEVE programme, with support through EuropeWave and RENMARINAS, has now begun and will run through to 2027. This signifies a significant milestone in our commercialisation journey, offering promising collaborations with forward-thinking partners and investors. Its great to see our ambitions aligning with the European Union's renewable energy objectives.

### REPORT TO SHAREHOLDERS QUARTER ENDED 30 SEPTEMBER 2023



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	CETO	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.
	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

The last quarter delivered several key achievements for the company, particularly in relation to progressing the commercialisation pathway of CETO technology through the successful EuropeWave contract award and RENMARINAS funding for our ACHIEVE Programme. These projects will continue to drive the technology validation forwards and support extended open water operation for CETO in Europe. Meanwhile, testing has continued with belt testing in Italy, mooring tensioner testing and MoorPower pre-deployment testing in Australia. The projects and partnerships associated with the current projects will continue to strengthen the commercial pathway of our CETO and MoorPower technologies.

### CETO

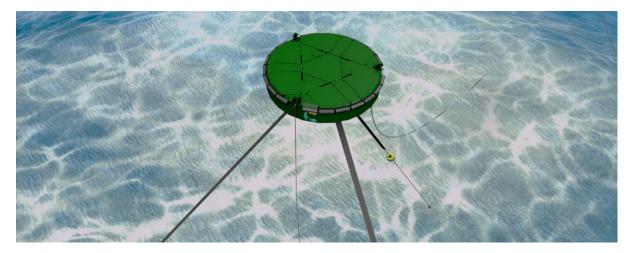
It has been a highly significant and successful quarter for Carnegie and the CETO technology with the award of a contract to deploy CETO in Europe through the ACHIEVE Project. Just weeks later, there was further recognition of the importance of this project through the award of additional funding to enhance the ACHIEVE activities from the Spanish Government.

In early September, Carnegie's wholly owned subsidiary CETO Wave Energy Ireland (CWEI), secured a  $\notin$ 3.75m (\$6.3m) contract as part of the competitive EuropeWave Pre-Commercial Procurement (PCP) program. This achievement signifies a major step towards advancing the deployment of CETO wave energy technology in European waters, with CETO grid-connected planned for 2025. Independent expert evaluators ranked CWEI's ACHIEVE Project proposal first across various categories, including levelised cost of energy (LCOE), generation performance, reliability, and survivability.

Under the Phase 3 EuropeWave contract for ACHIEVE, CWEI will build and operate a CETO wave energy converter at the Biscay Marine Energy Platform (BiMEP) in the Basque Country, Spain. The



EuropeWave program aligns with the European Union's ambitious goal of deploying 1GW of ocean energy by 2030 and 40GW by 2050 through its EU Offshore Renewable Energy Strategy.



CETO wave energy converter contracted for deployment at the Biscay Marine Energy Platform

In late September, Carnegie Technologies Spain, a wholly owned subsidiary of Carnegie, was awarded €1.2m (\$1.9m) from the Spanish Government to extend and enhance the ACHIEVE CETO deployment in Spain. The funding was granted as part of Spain's RENMARINAS DEMOS Program, which funds marine renewable energy projects in Spain. The grant supports the Company's AGUAMARINA Project (Avances en la Generación Undimotriz Adaptada al entorno Marino) which will deliver an improved CETO deployment at the BiMEP, engage with additional stakeholders and enable the project to meet enhanced technical and commercial objectives aligned with the CETO commercialisation pathway.

The AGUAMARINA funding complements the EuropeWave contract for the ACHIEVE Project and enables additional activities to be delivered for this key CETO deployment in Europe. Ultimately this funding improves and de-risks the activities whilst supporting Carnegie's ambition for this deployment to unlock the commercial roll out of the technology globally.



Belt testing at the IMPACT test rig at VGA s.r.l Italy

During the quarter CETO Wave Energy Ireland (CWEI) and VGA s.r.l collaborated under the IMPACT project to test the belt component of CETO's rotary Power Take-Off (PTO) system at VGA's testing



facility in Italy. CWEI was the inaugural user of the IMPACT test rig. The IMPACT project is developing a new testing approach for Wave Energy Converters, emphasising robust testing and model validation to manage risks and enhance reliability. This strategic collaboration has helped validate and de-risk the belt, a core component of the PTO systems for both CETO and MoorPower.

It is great to see increasing wave energy industry funding like EuropeWave and RENMARINAS, showing reocgnition of the need to diversify energy sources and address decarbonisation goals and validating wave energy's role in a clean and sustainable energy future. The Company retains the intellectual property rights in these projects, which allows us to exploit the full potential of the technology derived through the programme.

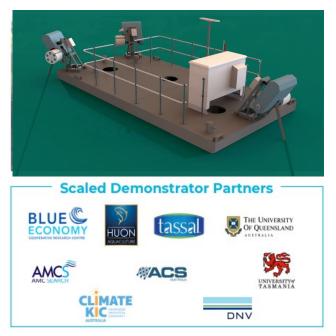
#### MoorPower

As the aquaculture sector expands its operations offshore, the demand for clean and reliable energy becomes increasingly critical. The reliance on diesel generators for energy-intensive offshore activities, such as feeding barges, brings with it a host of challenges, including high costs, environmental risks, and carbon emissions. This issue extends beyond aquaculture to encompass various moored vessels across the blue economy.

In response to this challenge, Carnegie Clean Energy developed MoorPower, a product that leverages the core principles of the CETO technology and the Company's extensive expertise to create an

innovative wave converter system specifically designed for offshore energy demand applications. MoorPower is set to transform the way energy is harnessed offshore, with its initial target market being aquaculture barges and vessels that require electrical power while operating in remote offshore locations.

The Blue Economy CRC (BE CRC) supported MoorPower scaled demonstrator has advanced during the quarter with onshore testing and validation of the power take-off units. Extensive testing ensures confidence and reliability in the technology in advance of offshore deployment. The barge is undergoing pre-deployment modifications in preparation for the integration of the PTO units.



#### **Complimentary Products**

The quarter also delivered further testing on the BE CRC supported MoTWEC (Mooring Tensioner for Wave Energy Converters) project at Carnegie's onshore testing facility. The Mooring Tensioner component provides passive tension to the moorings of the CETO and MoorPower units and has wider applications across various offshore industries. The Mooring Tensioner has been incorporated into the



PTO unit set to be deployed on the MoorPower project and will be incorporated into the CETO deployment at BiMEP in the ACHIEVE Programme.

### 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, 14 November 2023 at 9:00 am (AWST). Presentations at the AGM will provide insight into the Company's performance over the past year, information about the latest achievements in the ACHIEVE project and complimentary technologies, the proposed consolidation plans, and future strategies towards commercialisation. It is also an opportunity to engage directly with our leadership team, including the Board of Directors and Senior Management, and have your questions addressed.

#### **Annual Report**

The Annual Report for the Financial Year 2023 is now available. This report offers a detailed account of our company's financial performance, strategic initiatives, and achievements over the past year. The Annual Report provides a comprehensive overview of our operations and outlines our commitment to delivering sustainable growth and value. We encourage all shareholders and interested parties to review the report for a deeper understanding of our performance and strategic vision. The report is available on the Carnegie Clean Energy website. All shareholders have been provided with print or digital access to the 2023 Annual Report.

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).

### **Garden Island Microgrid**

During the quarter, the company resolved a dispute with one of its Garden Island Microgrid suppliers, relating to the supply of solar panels for Garden Island. The parties reach a settlement, formalised in a Deed of Settlement and Release. As part of the agreement, Carnegie has received a payment of \$1.5m in exchange for mutual releases provided by both parties.

### **EVENTS**

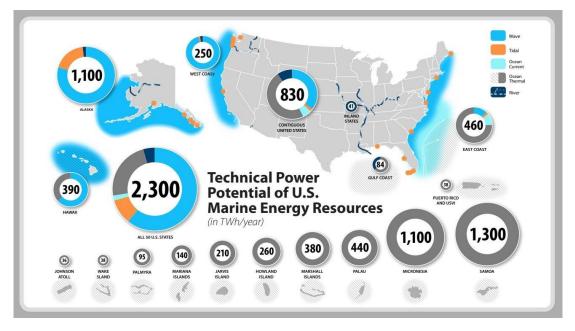
### **US Sustainable Blue Economy Caucus**

Our commitment to advancing wave energy solutions has resonated far and wide, with Carnegie Chief Commercial Officer Brighid Jay invited to present at the US Sustainable Blue Economy Caucus. The audience included distinguished Californian legislators and leaders from the clean energy sector.



This platform reflects the rapid evolution of the wave energy industry and the significant market potential in North America and beyond, as the world grapples with the clean energy transition. It's clear that we are collectively working towards solving a common problem.

Global clean energy targets and the imperative to reduce CO<sub>2</sub> emissions demand a solution of unparalleled scale, consistency, and predictability, and wave energy is part of the solution. During Brighid's presentation, she outlined how our CETO and MoorPower products are poised to address these challenges, propelling us towards a more sustainable energy future.



Marine Energy in the United States: An Overview of Opportunities

Source: Kilcher, Levi, Fogarty, Michelle, and Lawson, Michael. 2021. "Marine Energy in the United States: An Overview of Opportunities". United States. https://doi.org/10.2172/1766861. https://www.osti.gov/servlets/purl/1766861.

# **Optus Strategic Technology Forum**

Carnegie Senior Engineer, Mathieu Cocho also presented within the quarter to the Optus Strategic Technology Forum Study Tour. This program brought together leaders from key Australian organizations like Optus, Defence Australia, Commonwealth Bank, and others. Mathieu emphasised the pressing need for decarbonisation, transcending industry boundaries. He highlighted the pivotal role of wave energy in Australia's emissions and renewables targets. With a clear message: Wave technology will be deployed in Australia. Our choice is whether we import this technology or develop it locally.

### **Ocean Energy Europe Annual Conference**

After the Quarter end, CEO Jonathan Fievez and Project Manager Miguel Santos Herrán attended the Ocean Energy Europe Annual Conference 2023 in the Hague on October 25-26. This annual industry event brings together decision makers and industry representatives from Europe and around the world and is one of the key events in the ocean energy industry calendar.



In addition to giving multiple presentations during the conference, Carnegie had a stand in the exhibition hall which provided great opportunities to meet with collaborators, strategic partners and Government officials. This included a visit from the European Commissioner for Environment, Oceans and Fisheries, Virginijus Sinkevičius.



ACHIEVE Project Manager with European Commissioner for Environment, Oceans and Fisheries, Virginijus Sinkevičius

### **FINANCIAL NOTES**

At the end of the Quarter, Carnegie had approximately \$3.5m 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 \$75.6k 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

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#### 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<sup>®</sup> and MoorPower<sup>®</sup> 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. <a href="https://www.carnegiece.com">https://www.carnegiece.com</a>

#### 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).

