

Carnegie Clean Energy Presents at OTC Investor Webinar

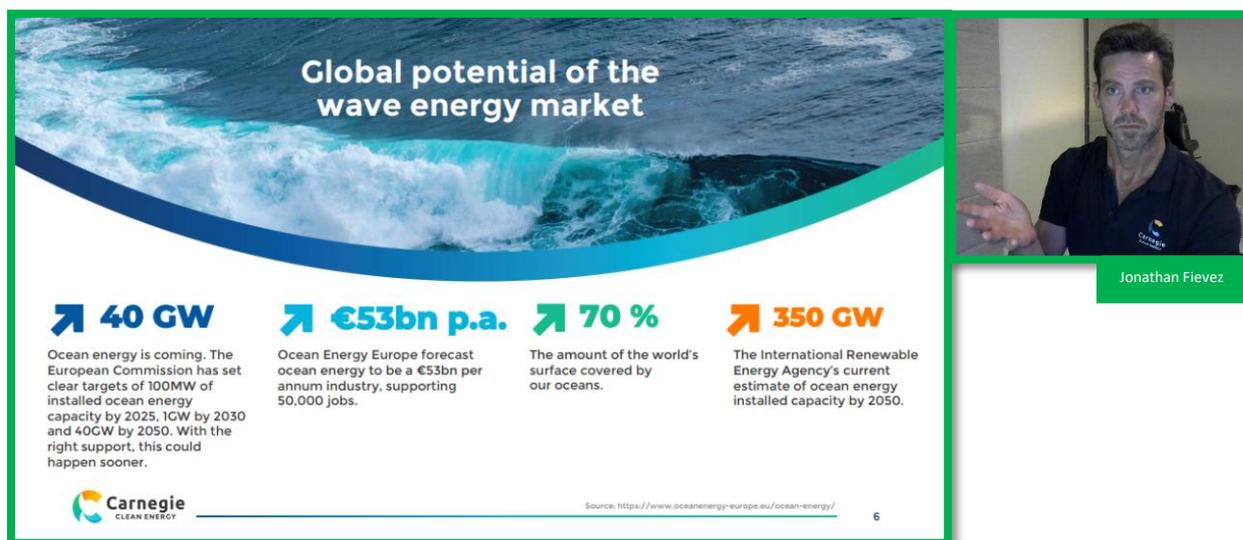
Carnegie Clean Energy (ASX: CCE) CEO Jonathan Fievez outlined the company's strategic path forward at the recent OTC Markets Virtual Investor Conference focused on Clean/Renewable Energy. Virtual Investor Conferences is a premier investor conference series, facilitating direct communication and presentations between publicly traded companies and investors. The participation was inspired by Carnegies recent dual listing on the US Over-the-Counter Quotation Bureau (OTCQB) under the ticker [CWGYF].

Mr. Fievez provided insights into Carnegie Clean Energy's recent progress, specifically focusing on the preparations for the deployment of CETO at the Biscay Marine Energy Platform (BiMEP) and successful award of financial support towards the ACHIEVE Programme through the EuropeWave PCP Programme and RenMarinas Demos Program.

The Recent deployment of MoorPower was also featured, demonstrating the applications of the innovative technology to the offshore aquaculture industry.

Mr Fievez highlighted the trajectory of wave energy technologies in alignment with previously commercialised renewable energy technologies and the vast opportunity both CETO and MoorPower technologies provide to the global energy mix.

Investors were encouraged to participate in a live Q&A session following the presentation, which led to some engaging conversation about a variety of topics including revenue models, what maintenance regimes are planned and issues around consenting.



Global potential of the wave energy market

- 40 GW**
Ocean energy is coming. The European Commission has set clear targets of 100MW of installed ocean energy capacity by 2025, 1GW by 2030 and 40GW by 2050. With the right support, this could happen sooner.
- €53bn p.a.**
Ocean Energy Europe forecast ocean energy to be a €53bn per annum industry, supporting 50,000 jobs.
- 70 %**
The amount of the world's surface covered by our oceans.
- 350 GW**
The International Renewable Energy Agency's current estimate of ocean energy installed capacity by 2050.

Jonathan Fievez

Source: <https://www.oceanenergy-europe.eu/ocean-energy/>

6

The presentation follows this announcement, please see below.

This announcement has been authorised by the Chairman and CEO.

ABOUT CARNEGIE

Carnegie Clean Energy (ASX:CCE, OTCQB:CWGYF) is a technology developer focused on delivering ocean energy technologies to make the world more sustainable. 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 Wave Predictor technology developed by Carnegie uses a proprietary machine learning algorithm to improve the performance of our wave technologies and has additional applications beyond the wave energy industry. The company has a long history in ocean energy with a track record of world leading developments. Based in Australia with a global presence, Carnegie's wholly owned international subsidiaries such as CETO Wave Energy Ireland are actively engaged in our product development.

For more information

Carnegie Clean Energy Limited

+61 8 6168 8400

enquiries@carnegiece.com

www.carnegiece.com

CETO

Carnegie subsidiary CETO Wave Energy Ireland secured contracts for the deployment of CETO in Europe in 2025. A €3.75 million EuropeWave Phase 3 contract was awarded for the ACHIEVE Project, set to deliver and operate CETO wave energy technology off the Basque Country at the BiMEP wave energy test site. Additionally, a €1.2 million grant from the Spanish Government supports Carnegie's AGUAMARINA Project, enhancing and extending CETO deployment through the ACHIEVE Programme.

CETO Wave Energy Ireland's contract win to build and operate a CETO wave energy converter in Europe by 2025 marks a major milestone. Aligning with the EU's ambitious targets of 1GW of ocean energy deployment by 2030 and 40GW by 2050.

MoorPower

The MoorPower initiative seeks to revolutionise offshore operation through substantial reduction in reliance on diesel generators, thereby mitigating associated risks and carbon emissions. Huon Aquaculture and Tassal Group, key Australian aquaculture specialists and partners of the Blue Economy CRC, stand as potential first adopters, exemplifying the project's commitment to industry collaboration.



Carnegie
CLEAN ENERGY

Delivering Wave Energy To The World

We are unlocking the vast power of the ocean



“The history of humanity has been shaped by how it has harnessed energy.

“The sun and wind are now driving our economies. With every discovery of a new source, we have unlocked a new era of prosperity...”

Jonathan Fiévez,
Carnegie CEO

Our global challenge is to deliver a transition to clean energy with the ability meet future demand for sustainable, reliable and affordable energy.

Wave energy is unique. Unlocking its potential will change the world.

It is a source of renewable energy that is consistent and predictable.

Wave energy produces zero emissions and can provide 24/7 power at scale – it has immense potential.

Carnegie Clean Energy is a global leader in wave energy technology. We are committed to harnessing the power of the ocean.

From Fremantle in Western Australia, our technology is ready to change the world.



Our wave energy technology is at inflection point

Wave energy is set to become commercial. Carnegie Clean Energy's CETO Technology is proven and independently judged as a world leader.



This innovation has the potential to bolster energy security, reliability and affordability globally.



Levelised cost of energy for CETO is dropping on a trajectory that is meeting or exceeding the maturity pathway of the renewable technologies (such as wind and solar PV) that came before it.



OEE currently forecast 100MW installed ocean energy by 2025 and 1GW by 2030, this represents a large addressable commercial market for wave-generation technology in which CETO technology has been independently verified as leading edge.



Carnegie Clean Energy as a business is in transformation and at its inflection point commercially.



We have begun engaging with strategic partners who share our vision and understand that scale is the key to unlocking potential for the planet.

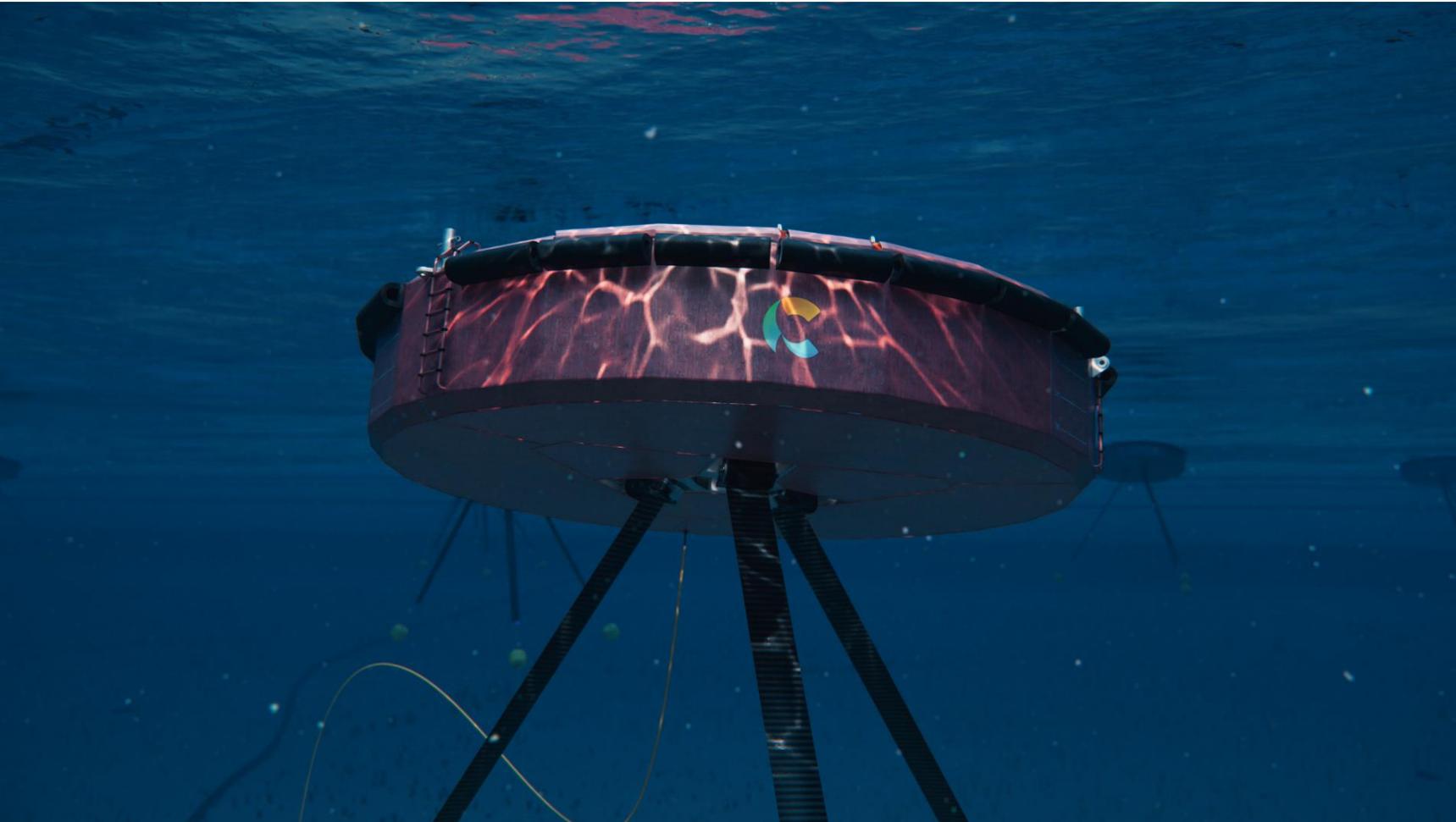
Carnegie:

An energy technology company with a portfolio of established assets



- We own the intellectual property for our world leading wave energy technology.
- Headquartered in Fremantle, we have subsidiaries in Spain, Ireland and the UK anchoring our European footprint.
- Carnegie owns and operates a 2MW solar-battery system with capacity for future integration of wave energy. It currently serves the Department of Defence.
- In Western Australia, we benefit from access to three deployment sites in Fremantle, Garden Island and Albany.

CETO – Harnessing Ocean Waves



Our core technology is unique and avoids known issues

- Water in waves move in an orbit. The buoy is forced to move in the same motion



- This kinetic energy is transformed by the three Power Take-Offs within the buoy
- CETO operates fully submerged, avoiding issues of visual amenity and damaging forces in breaking storm waves
- Artificial intelligence helps us capture more by adapting to every individual wave that passes

Global potential of the wave energy market

↗ 40 GW

Ocean energy is coming. The European Commission has set clear targets of 100MW of installed ocean energy capacity by 2025, 1GW by 2030 and 40GW by 2050. With the right support, this could happen sooner.

↗ €53bn p.a.

Ocean Energy Europe forecast ocean energy to be a €53bn per annum industry, supporting 50,000 jobs.

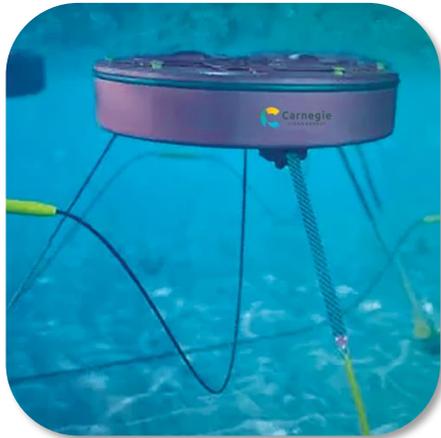
↗ 70 %

The amount of the world's surface covered by our oceans.

↗ 350 GW

The International Renewable Energy Agency's current estimate of ocean energy installed capacity by 2050.

CETO harnessing the power of the oceans



We have a suite of technologies that have our CETO wave energy technology at their core.

- CETO is a fully submerged point absorber buoy anchored to the seabed. It operates a few metres below the surface of the ocean.
- The differential movement in the mooring and the buoy created by the waves drives a rotary **Power Take-Off (PTO)** system that converts that kinetic energy into grid-ready electricity.
- The core CETO technology has been adapted and integrated into **MoorPower**, a wave energy converter meeting the challenges of powering offshore aquaculture.
- CETO includes additional complementary products including **Wave Predictor** and **Mooring Tensioner**.

Our complementary technology suite

MoorPower

- CETO derived technology to power moored offshore vessels (such as barges in the aquaculture sector) through wave power.
- Can reduce or eliminate offshore diesel usage.
- Validated via \$3.4m AUD MoorPower Scaled Demonstrator Project.

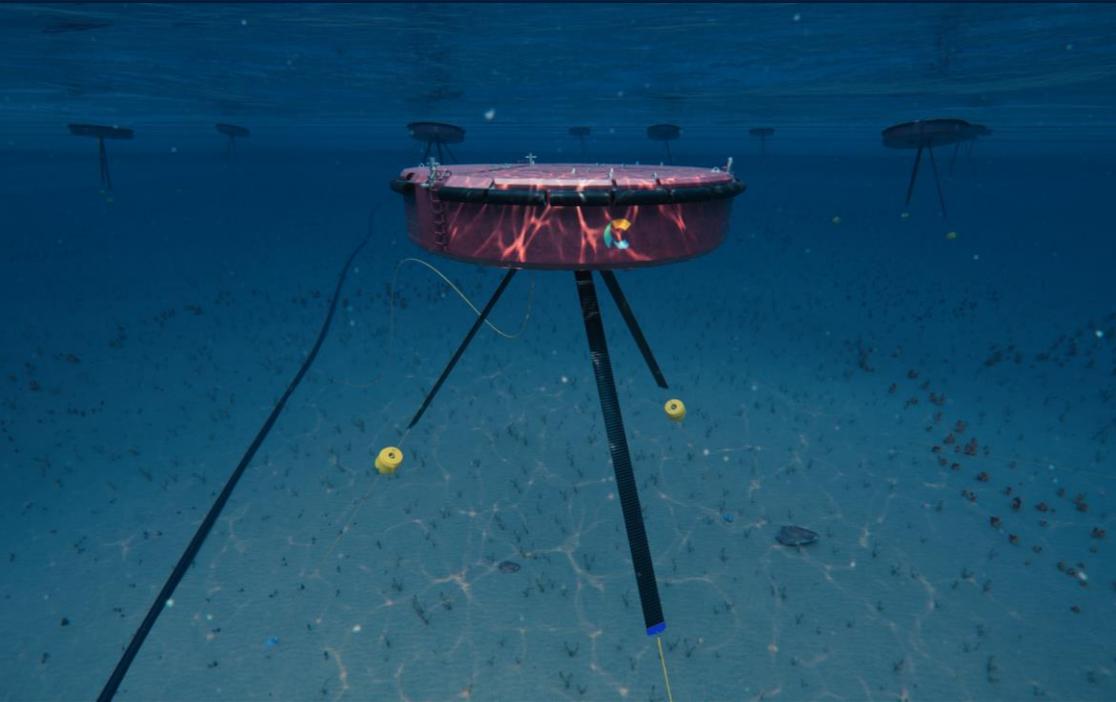


Wave Predictor

- Product able to predict upcoming waves using AI up to minutes into the future, before they impact the shore, a structure or a wave energy converter.
- Increases the safety and performance of activities including critical offshore operations and rock fishing.

Mooring Tensioner

- Provides passive tension for CETO and MoorPower products.
- Can be a standalone offering that improves station-keeping for vessels.
- Prototype and test rig built and testing is underway.



ACHIEVE Project – Basque Country Deployment

EuropeWave Contracted Deployment

- ✓ From initial 36 applicants, Carnegie's ACHIEVE project ranked **number one**
- ✓ Judged on criteria including LCOE, performance, reliability, availability and survivability
- ✓ €3.75m deployment contract awarded in September 2023
- ✓ Design/procurement contracts currently being awarded
- ✓ Target is deployment at BiMEP in summer 2025 with 2 years of operation
- ✓ Growing team in Spain (Bilbao) to execute the project

Additional National Recognition

- ✓ Spanish Government (IDAE - Renmarinas) awarded additional €1.2m to support and enhance Project in December 2023

MoorPower: Wave Energy for Aquaculture and Offshore Demand



Aquaculture Needs Driving Development

- ✓ Product developed based on requirements and characteristics of offshore aquaculture
- ✓ BE CRC Supported Project
- ✓ Consortium of partners including leading aquaculture companies Huon (JBS owned) and Tassal (Cooke Aquaculture owned)

Demonstrator Deployed

- ✓ Scaled Demonstrator deployed at Carnegie's offshore test site in WA in January 2024
- ✓ Operations commenced

MoorPower Commercialisation



Battery Storage

- Onboard storage of electricity for energy intensive periods

Future MoorPower Commercial Project

Offshore Aquaculture

- Offshore fish pens requiring on site barges for feeding and maintenance

Power Take Off Units

- Converts the mechanical energy captured into electrical energy
- Controls the Unit

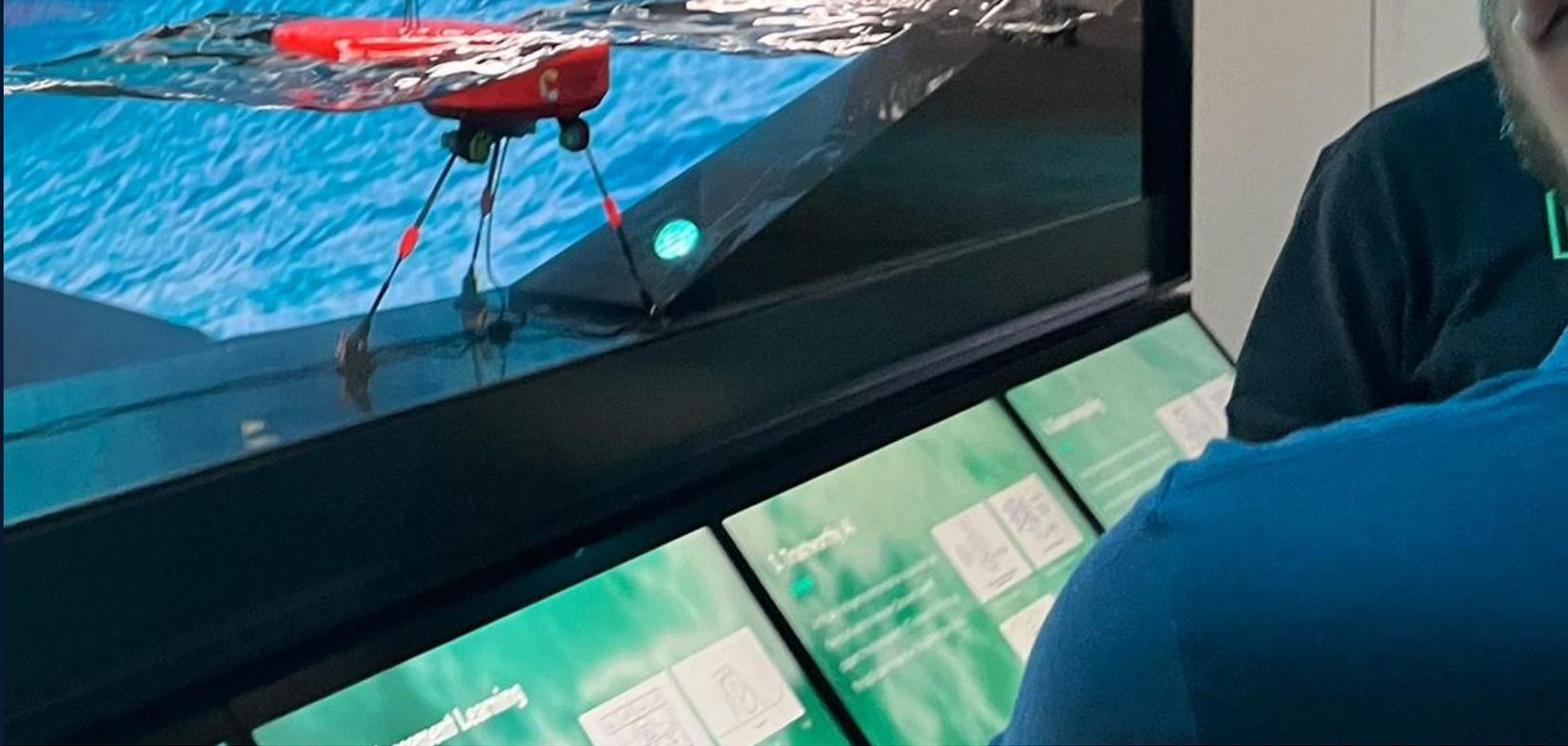
MoorPower Demonstrator Project

Belt Mooring System

- Connects the unit to the Foundations
- The foundations remain in place, providing energy during periods of inactivity

Next Steps

- ✓ Working with partners on the development of the MoorPower Commercial Project.
- ✓ Plan to deploy MoorPower on operational barge.
- ✓ Unlocking commercial pathway.



Our partners

Carnegie has built a strong partner ecosystem

Our partners include:



EUROPEWAVE





Our announcements are capturing public attention, building pride in what is being achieved



20 THE AUSTRALIAN, WEDNESDAY, SEPTEMBER 6, 2023 theaustralian.com.au/businessreview

Australia must ride the wave of ocean power

JONATHAN FIEVEZ

The power of the sea should never be ignored. It's a lesson most Australians learn as young children while wading in the shallows; turning your back on even small waves is rarely a good idea. Yet as adults, it seems this is a lesson we may need to relearn. As coal retires from our power systems we need at least 90 per cent of the world's electricity to come from renewable sources. Wind and solar farms, once controversial, are now commonplace and an essential part of the energy mix. Yet the question of what happens when the wind doesn't blow and the sun doesn't shine still needs answers. Wave energy provides one of those answers. What happens on a still night when solar stops producing and the wind is calm? Look out to sea, the waves keep rolling in. It is variable, but consistent and highly predictable—a unique feature among other renewables. This is why Australia's dramatic coastline isn't just beautiful, it also has the potential to accelerate the country's rise into a clean energy superpower. In fact, the CSIRO says we possess the world's largest wave energy resource. It is generation with near zero emissions and enormous potential. But wave energy technology still requires more development. We are currently at a similar

It will eventually supply cities, remote communities, offshore aquaculture and other offshore commercial facilities with affordable, reliable and sustainable energy. Many countries, including Australia, China, Britain, France, Spain and the US, are currently developing wave energy. Our Australian technology is grabbing the attention of these countries and many more. What we've developed and tested in the waves in Western Australia and overseas has the potential to harness the power of the ocean right around the world. At the moment, governments abroad are leading the way when it comes to supporting the development of this technology. Ironically, most of these countries have coastlines smaller than Australia's with lower wave energy potential, but they recognise the opportunity as well as to capture a leadership in order to deliver the value of the environment and their economy. As fossil fuels leave the system over the next decade will need all the tools in our toolbox to ensure a resilient cost-effective grid. The reasoning behind re-declaration of offshore wind zones in Gippsland and the Hunter makes similar arguments. It isn't one form of energy or another, it's about harnessing all of the renewable energy opportunities in our portfolio get to where we need to be in time to make a difference.

As fossil fuels leave the system over the next decade will need all the tools in our toolbox to ensure a resilient cost-effective grid. The reasoning behind re-declaration of offshore wind zones in Gippsland and the Hunter makes similar arguments. It isn't one form of energy or another, it's about harnessing all of the renewable energy opportunities in our portfolio get to where we need to be in time to make a difference.

degrees, vibration-free battery, and compressed air generator.

COMPRESSED AIR
A British-born engineer, Jonathan Fievez, chief executive of Carnegie Clean Energy, built his first unit with

Will it be

"Remarkable:" Australian wave energy pioneer wins major tender to build first unit in Spain

Sophie Vorrath 6 September 2023



Spain backs Carnegie with €1.2M for CETO wave energy device deployment

Hobart Today 4°/16°

Business > Stockhead

Which ASX stocks are protecting their IP with a green technology patent?

Green tech innovation is essential to achieve climate change goals and many countries have fast-tracking schemes in place for green tech patents.

Emma Davies
7 min read September 11, 2023 - 12:27PM Stockhead

0 comments

THE SYDNEY MORNING HERALD, FRIDAY, JANUARY 5, 2024

Business

Gold: 3020.44 (+0.2) Iron ore: 80.94 (-0.2) WTI Crude: 80.75 (+0.1)

New wave of high-tech to fix nation's energy storage



The giant tubes electricity from the grid there is being converted to compressed air underground, and when the wind dies and prices are higher, using a technique that's energetically simple. Electric-powered compressors force air down a narrow underground shaft, displacing water from underground caverns through a different, larger diameter shaft. The compressed air then flows back up the shaft to the surface. When power is needed, the compressed air is pushed back up through a turbine to generate electricity. Carnegie will build its generator from a closed section of broken pipe. It's a smaller and cheaper version. It was inspired by the idea of a 'waste' that once was used as a smaller project in the US. Carnegie is now the first project in Australia.

FLOW BATTERIES
A first-of-its-kind project is being built in the national grid. It's a battery that uses seawater. It's a battery that uses seawater. It's a battery that uses seawater.

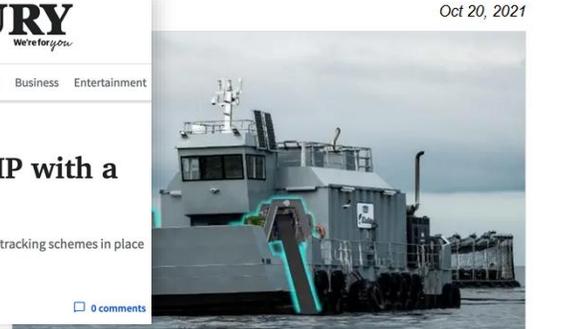
Another company wanting to smooth the load for the grid has built Australia's first commercial facility. It's a battery that uses seawater. It's a battery that uses seawater. It's a battery that uses seawater.

Another company wanting to smooth the load for the grid has built Australia's first commercial facility. It's a battery that uses seawater. It's a battery that uses seawater. It's a battery that uses seawater.



REGIONS ENERGY GEOSCIENCE ENGINEERING TECHNOLOGY VESSELS SUBSEA DRILLING

Carnegie Launches Wave Energy Device to Power Moored Vessels



Best: 100% (100%) Worst: 100% (100%)

ASX 250: 7000 (+0.5%)

ASX 200: 7000 (+0.5%)

ASX 100: 7000 (+0.5%)

ASX 50: 7000 (+0.5%)

ASX 25: 7000 (+0.5%)

ASX 10: 7000 (+0.5%)

ASX 5: 7000 (+0.5%)

ASX 2: 7000 (+0.5%)

ASX 1: 7000 (+0.5%)

Carnegie Clean Energy CEO Jonathan Fievez. Photo: Trevor Collins

government to deploy and lead a smaller number of the vessels, with large amounts of money, with a focus on the West Coast. Carnegie Clean Energy CEO Jonathan Fievez said the company has developed a system that can be installed on a later point and converted to high-pressure steam, generating multiple megawatts of renewable energy.

THERMAL ENERGY
"It has been tested in 600 degrees, long-term storage," said Mark Cranford. "The deputy chief of operations of the facility is a former Carnegie Clean Energy CEO. The deputy chief of operations of the facility is a former Carnegie Clean Energy CEO. The deputy chief of operations of the facility is a former Carnegie Clean Energy CEO."

perth now | fiverr. Need video editing?

NEWS SPORT ENTERTAINMENT BUSINESS LIFESTYLE LOCAL NEWS READ YOUR LOCAL NEWS

BREAKING NEWS ECONOMY MARKETS PROPERTY COMMERCIAL PROPERTY WORKPLACE MATTERS



Europe selects Aussie wave technology for ocean energy

Wave energy can complement solar and wind, Carnegie Clean Energy CEO Jonathan Fievez said. (PHOTO: HANDOUT IMAGE PHOTO) Credit: AAP

Current Carnegie Projects

ACHIEVE Programme

CETO Deployment in Europe

€4.95m (A\$8m) funding secured:

- EuropeWave Contract €3.75m
- Spanish Government Support €1.2m

Garden Island Microgrid

A\$2.2m Valuation
Conservative Valuation

MoorPower Demonstrator

MoorPower Deployment in Australia

A\$3.4m Funding secured with support
from the Blue Economy CRC

Our experienced board with proven track record



Terry Stinson
Non-Executive Chairman

Terry brings over 35 years of leadership and commercial experience with global innovative companies.



Michael Fitzpatrick AO
Non-Executive Director

Committed to sustainability, Michael is a precursor in renewable investments, including investing in the first commercial windfarm in Australia in the 1990s.



Anthony Shields
Non-Executive Director

Anthony has vast financial expertise and is the Managing Director of Asymmetric Investment Management Pty Ltd.



Grant J Mooney
Non-Executive Director /
Company Secretary

Grant brings broad knowledge in the areas of corporate governance and project management.



Our world-class management team



Jonathan Fiévez
Chief Executive Officer

Jonathan brings considerable expertise in innovation and technical leadership. He's been with the company for 15 years and has a wealth of experience in the broader energy sector.



Brigid Jay
Chief Commercial Officer

Brigid has a Masters in Environmental Sustainability and brings expertise in innovation policy. She has been with Carnegie for over 12 years and supports our corporate, commercial, intellectual property, legal and partner ecosystem functions.



Dr Alexandre Pichard
Chief Technology Officer

Alexandre has a Doctorate in Physics and has been a core member of Carnegie's engineering team for over 12 years. He brings a deep understanding of our technologies, supply chains and the wider wave energy industry.

“Our team is delivering a leading technology that is capturing attention right around the world.”

Jonathan Fiévez,
Carnegie CEO





**Be part of the innovation that will unlock the power
of the world's oceans**

\$CWGYF