Harnessing the power of ocean energy to make the world more sustainable

Investor Presentation

October 2022

Carnegie Clean Energy Limited
ASX: CCE

Carnegie Clean Energy Opportunity

Global clean energy generation and CO_2 reduction targets are unlikely to be met without the scale, consistency and predictability of wave energy

- Carnegie is a global emerging leader in wave energy technology
- Carnegie's CETO wave energy technology is projected to generate electricity at costs comparable to other clean energy technologies (solar / wind) when deployed at scale
- Carnegie has a documented and independently verified body of work demonstrating CETO energy production and efficiency outperforming established ocean energy industry LCOE (levelised cost of energy) targets
- Leading participant in the EuropeWave PCP, a €22.5m EU-funded R&D programme to advance wave energy technologies for deployment in real sea conditions

Carnegie Clean Energy Opportunity

Carnegie now ready to lead the industry into commercial deployment

- Carnegie's CETO technology is unique:
  - Operates below the surface at various depths – improves survivability and minimises visual and environmental impact
  - Integrates machine learning, wave prediction and smart control systems – enhancing efficiency and generation capacity
  - Only wave energy company to successfully deploy, operate (12 months) and recover a multi-device wave energy project
  - Integrates well with other technologies (solar, wind, battery storage, water desalination, etc)

- Strong business case and investment proposition:
  - ASX listed, A$30m market capitalisation, A$4m cash, no debt, Directors are major shareholders
  - CETO awarded Phase 1 and Phase 2 contracts in competitive EuropeWave PCP €22.5m Programme
  - Funded $3.4m MoorPower Scaled Demonstrator Project underway, designed to secure clean energy for offshore structures
  - Strategic investors and commercial partner ecosystem – HPE, Hutchinson, Microsoft, EuropeWave, Blue Economy CRC
  - Revenue generation from Government (Defence) electrical supply contract at 100% owned microgrid energy project (wave, solar, battery, desalination plant) in Western Australia

Carnegie Clean Energy Opportunity

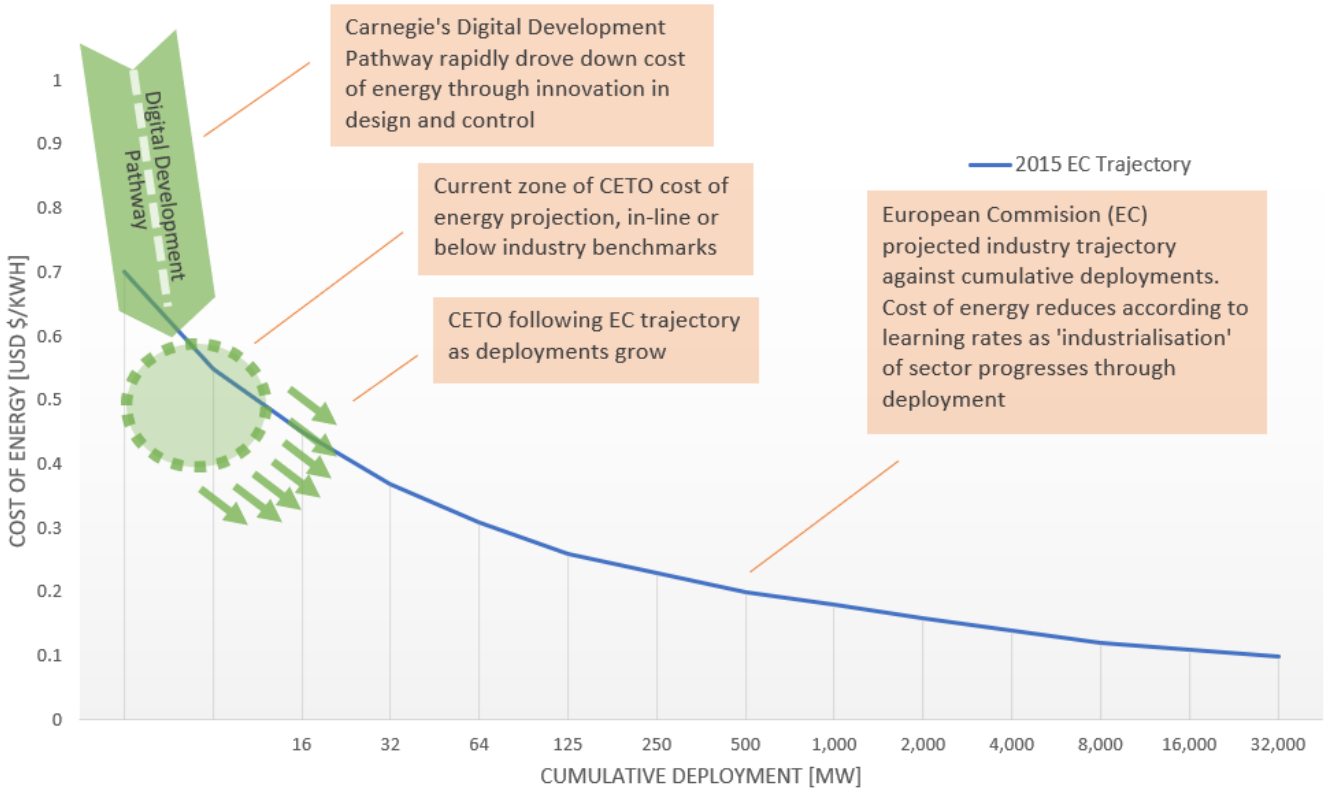
Ocean Energy Total Addressable Market (TAM)

- Europe is the global frontrunner in the race to commercialise wave energy technology
- European Commission sets clear targets of **100 MW of installed ocean energy capacity by 2025 and 40 GW by 2050** to reduce dependence on fossil fuel imports[1]
- Wave energy can provide clean **24/7 power at scale**
- Wave energy is the **most concentrated form** of renewable energy, with power density much higher than that of wind and solar energy
- Offshore installations and islands are the **first markets** where wave energy can be the best option, as solar and wind are challenging due to the lack of available land and visual amenity impacts
- Utility scale projects can power cities and represent the **largest market opportunity**

[1] European Commission, Offshore renewable energy, 2020

CETO Commercialisation

CETO's cost and performance enhancements accelerate commercialisation



Cost of energy vs deployment relationship for wave industry (as per EC trajectory) and CETO

- Innovations in smart control systems, hydrodynamics and generator efficiency gains (levering the boom electric vehicles) have combined to deliver a step change reduction in the projected CETO cost of energy and up to 30% more energy being captured
- Wave energy is following a similar trajectory to offshore wind and solar PV before early commercialisation – CETO is outperforming industry target benchmarks
- EuropeWave PCP will validate the improved CETO along defined pathway
- Achievements to unlock opportunities with new and existing strategic partners
- Carnegie continues to work on further cost reductions and energy capture increases

Experienced Board & Management

With proven track record

Terry Stinson
Non-Executive Chairman

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

Formerly the CEO and Managing Director of Orbital Corporation Ltd and Vice President and General Manager at Siemens AG responsible for over 1,200 staff and delivering sales in excess of US $300m p.a.

Mr Stinson is Chairman of Talga Group Ltd and a Non-Executive Director of Aurora Labs Ltd.

Jonathan Fiévez
Chief Executive Officer

Mr Fiévez brings considerable expertise in innovation and technical leadership.

Formerly Carnegie's CTO, he has been part of the company for 14+ years and is a named inventor on several CETO patents.

Mr Fiévez was previously involved in developing aircraft crack detection systems which were successfully applied to the Eurofighter and A380 Air designs.

Michael Fitzpatrick AO
Non-Executive Director

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

He founded Hastings Funds Management Ltd, managing investments of $3.8+ billion.

A Non-Executive Director of Infrastructure Capital Group, Mr Fitzpatrick led a billion-dollar renewables fund owning wind, solar and hydro assets.

He was a former Director of Rio Tinto Ltd.

Anthony Shields
Non-Executive Director

Mr Shields has vast financial expertise and is the Managing Director of Asymmetric Investment Management Pty Ltd, specialised in private debt, venture capital and risk management.

He sits on a number of company Boards in a non-executive capacity, including of Source Certain International, NWQ Capital and Old Perth Port.

Grant Mooney
Non-Executive Director and Company Secretary

Mr Mooney brings broad knowledge in the areas of corporate governance and project management, since establishing corporate advisory firm Mooney & Partners in 1999.

Currently, he serves as a Director on ASX listed companies Aurora Labs Ltd, Accelerate Resources Ltd and Talga Group Ltd.

Corporate Structure | ASX: CCE

Capital Structure

Shares on issue
15,102,573,710

Market Cap (10.10.22)
A$30.2m

Performance rights/Options
2,530,000,000

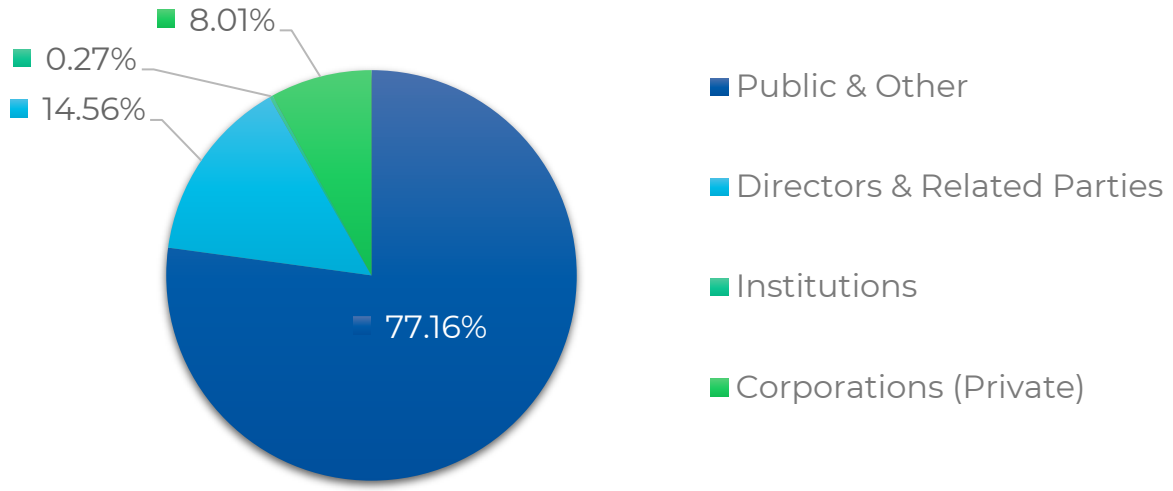
Cash position (30.06.22)
A$4.0m

Share Price (10.10.22)
$0.002

No debt

Top Shareholders	% Shares on Issue
Michael Fitzpatrick (Director)	6.76%
Anthony Shields (Director)	4.22%
Dawnray Pty Ltd	2.67%
Grant Mooney (Director)	2.32%
Richcab Pty Ltd	1.34%
Daws & Sons Pty Ltd	1.18%

Ownership Structure



Number of Shareholders: 13,117*

*As at Sep 2022, Capital IQ

Global Context & Opportunity

Global demand for renewable energy

Renewables are set to become the dominant source of energy

Driven by global policies

- Climate change is the biggest challenge faced by our planet today
- Governments and businesses are accelerating efforts to secure net zero CO_2 emissions by 2050 and replace fossil fuels, as evidenced by:
  - European Union's Renewable Energy Directive
  - US Inflation Reduction Act 2022
  - Australia Climate Change Bill 2022
- The Russia-Ukraine war also shows the commitment to steer away from gas monopolies
- By 2050, nearly 90%[2] of global energy is predicted to come from renewables, a huge increase from today's 6% contribution
- The acceleration in global governments' support for renewables is set to drive wave energy to commercial exploitation

Projected electricity generation worldwide to 2050

[2] EIA.GOV (2021) International Energy Outlook 2021

Potential for wave energy

In the net-zero future to decarbonise the energy sector

Wave Energy is an untapped opportunity

- With the ocean covering more than **70% of Earth**, wave energy is an enormous clean, renewable resource
- It's the most **consistent, predictable and abundant source of clean energy** – available day and night
- Rapid variations in wind speed and solar radiation cause challenges in grid stability and reliability
- Wave energy **complements variable wind and solar** and requires lower associated energy storage due to consistent output
- Can co-exist and even enhance marine life and coastal ecosystems

Carnegie at Blue Economy CRC Conference, Tasmania 2022

Wave to follow other renewables

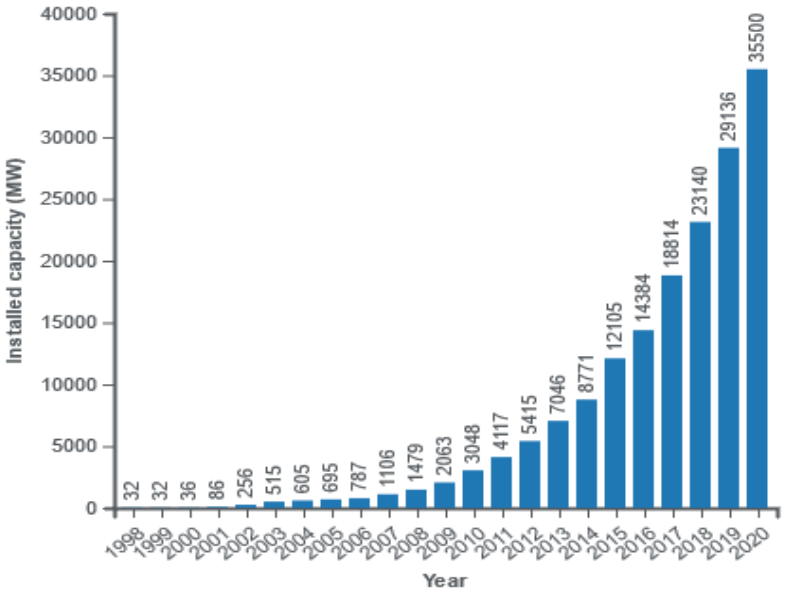
Offshore wind and solar sectors serve as a blueprint

The next big thing in energy

- Wave energy is expected to achieve growth rates in line with previously developed technologies such as offshore wind and solar PV
- 1991 – 5MW installed in world's first offshore wind farm, Vindeby
- End of 2020 – 35 GW Installed globally[3]
- Established renewables have demonstrated viable cost reduction pathways which the wave energy sector will follow
- Ocean energy has the potential to provide 10% of Europe's current electricity needs by 2050 - enough to power 94 million households every year[4]
- A strong combination of renewables is critical to our planet's health

Global cumulative offshore wind capacity (MW)

Sources: GWEC (2011–2020) and EWEA (1998–2010)



[3] Global Offshore Wind Report (2021) Global Offshore Wind Report 2021
[4] Ocean Energy Europe, March 2020

Europe leading the race in wave energy

Global frontrunner in funding and adoption

Indicating support and acceleration in wave energy investments

- Global investment in ocean energy increased by 50% in 2021[5]
- Ocean Energy Europe (OEE) forecasts a €653b market potential for ocean energy alone by 2050[6]
- Europe remains at the epicentre of wave energy deployments, also seen by the €22.5m EU-funded EuropeWave PCP Programme and the UK Government's annual £20m ring-fenced tidal stream funding
- The commercial commitments to ESG present a substantial opportunity for Carnegie

[5] Energy Digital (2022) Future Energy
[6] Carbon Trust (2011) Marine Renewables Green Growth Paper
[7] Ocean Energy Europe(2022) Key trends and statistics 2021

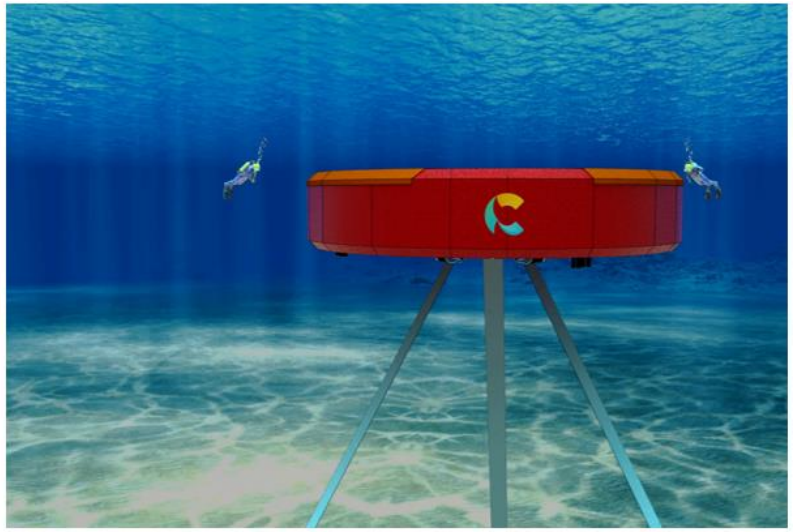
Upside for Carnegie

Best in class technology and growing European footprint

Strong European presence

- Carnegie has a growing European team, including wholly-owned subsidiary CETO Wave Energy Ireland and a new Spanish subsidiary
- Global partners include top multinationals Hewlett Packard Enterprise and Hutchinson (Total)
- Technology's strength and potential confirmed by the award of Phase 1 and subsequent Phase 2 of the EuropeWave PCP Programme, to advance the most promising wave energy technologies for commercial exploitation
- Carnegie's objectives are aligned with EuropeWave PCP - paving the way for a commercial roll-out and a means to attract future project partners

CETO EuropeWave Project Partners



CETO Wave Energy Ireland
saitec offshore technologies
DNV
HUTCHINSON
Hewlett Packard Enterprise
JULIA F. CHOZAS CONSULTING ENGINEER
VGA
IH cantabria
EUROPEWAVE

Carnegie Products & Strategy

Our technology and benefits

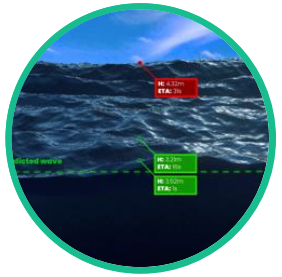
Unique competitive products to capture commercial opportunities

CETO

- Wave energy converter, converting ocean waves into zero-emission electricity
- Submerged buoy that sits a few metres below the ocean and moves with the waves
- Addresses global utility scale electricity, remote grids and island markets
- Validated via EuropeWave PCP project

MoorPower

- CETO-derived technology to power moored offshore vessels (i.e. barges in the aquaculture sector) through wave power
- Can reduce or eliminate offshore diesel usage
- Validated via $3.4m 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
- Validated via physical material property and fatigue testing

Our partners

Fostering our partner ecosystem to accelerate commercialisation

Partners involved in commercialisation projects

EUROPEWAVE

HUON AQUACULTURE

tassal

saitec offshore technologies

HUTCHINSON

DNV

CLIMATE KIC AUSTRALIA

BLUE ECONOMY COOPERATIVE RESEARCH CENTRE

JULIA F. CHOZAS CONSULTING ENGINEER

YAVIN FOUR CONSULTANTS

Partners involved in tech advancements

PAWSEY supercomputing centre

Hewlett Packard Enterprise

Hewlett Packard Labs

Microsoft

AMCS AMC SEARCH

ACS AUSTRALIA

THE UNIVERSITY OF QUEENSLAND AUSTRALIA

IH cantabria INSTITUTO DE HIDRÁULICA AMBIENTAL UNIVERSIDAD DE CANTABRIA

THE UNIVERSITY of ADELAIDE

UNIVERSITY of TASMANIA

Strategic Priorities Executed

Over last 12+ months

1

Create unique competitive products

✓

2

Build a market for wave energy

✓

3

Foster the partner ecosystem

✓

4

Secure financial sustainability

✓

5

Cultivate high performing team

✓

Strategic Priorities Forward

Carnegie CLEAN ENERGY

Commercialise our suite of products with strategic partners, while advancing the technology

Reduce the cost of wave energy generation to allow for its uptake and accelerate scale and customers

Why now

This is the time to get involved in Carnegie

Why Carnegie

- Best in class CETO wave energy technology
- Contracts in place and tier one partnerships
- Just the beginning, upward outlook for growth

Why wave energy

- The most consistent and concentrated source of clean energy – present 24/7
- Power density much higher than wind and solar energy

Governments committed to renewables

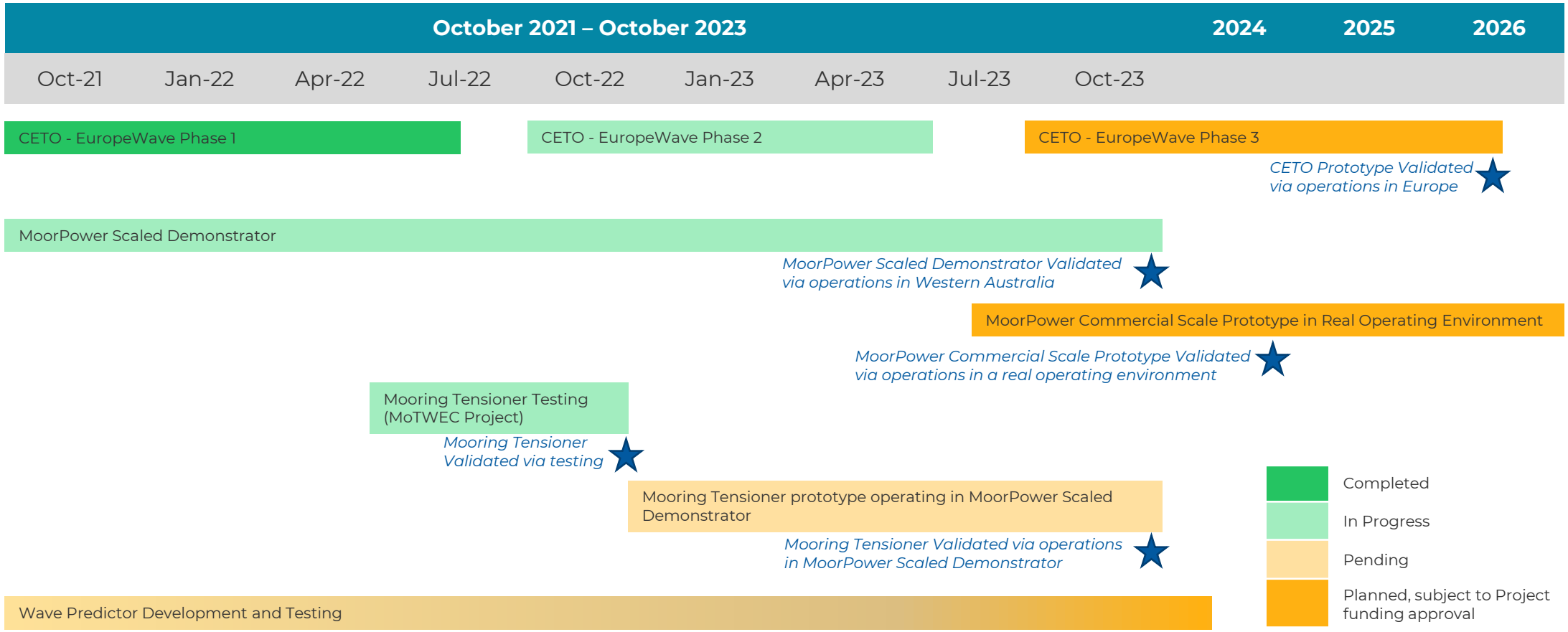
- Acceleration to net zero by 2050 is increasing the support for wave energy investments to reach commercial exploitation
- Locally sourced renewables support growing energy security priorities

Investors committed to ESG

- Growing focus on business sustainability is shifting investor behaviours to socially conscious investments
- ESG reporting becoming mandatory

Group Product Validation Roadmap

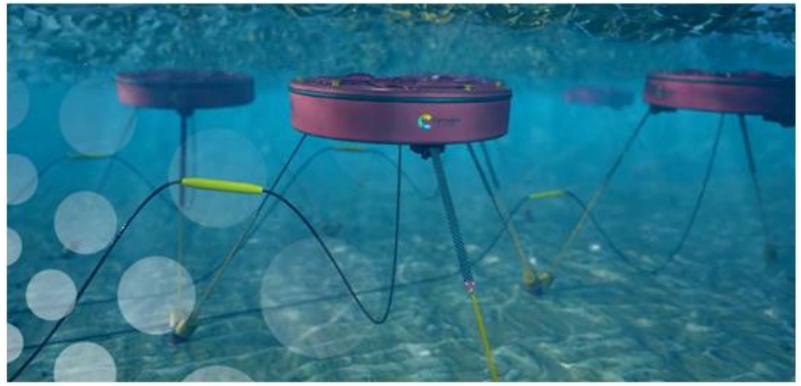
Carnegie Products
Product Validation Roadmap Summary



CETO® gaining traction

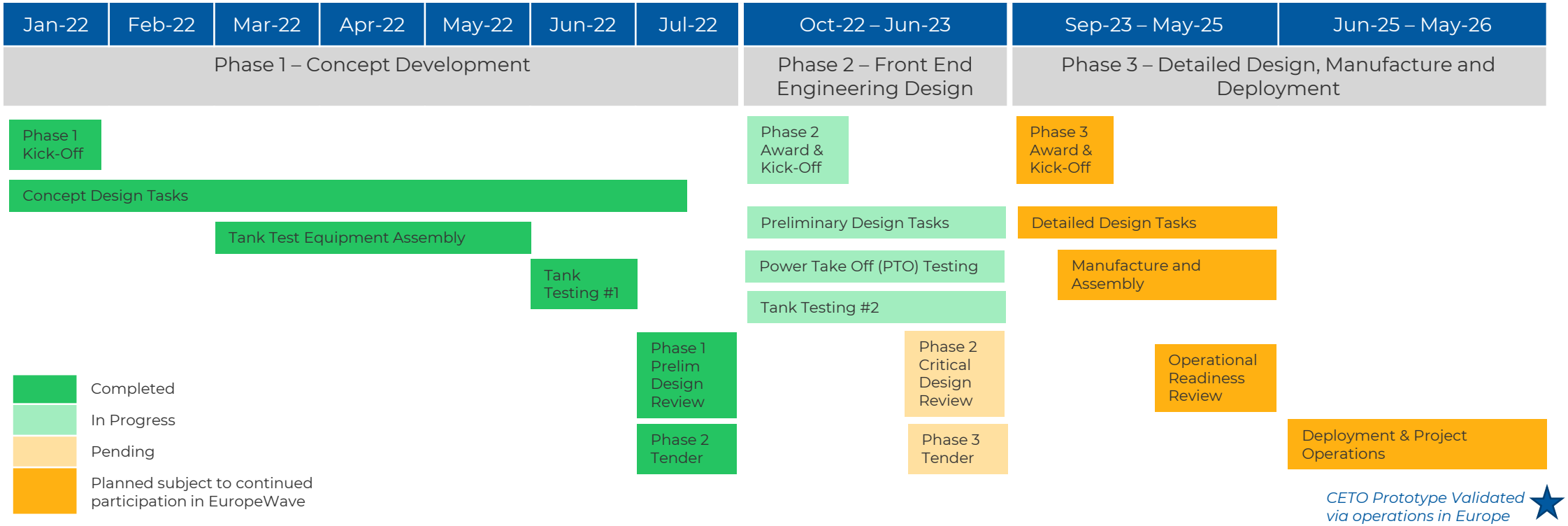
CETO – EuropeWave PCP

- **Commercial progress**
  - Selected for EU funded €22.5m EuropeWave PCP Programme, to advance promising wave energy technologies for commercial exploitation, running from 2021 to 2025
  - CETO Wave Energy Ireland chosen as 1 of 7 contractors for Phase 1, valued at €291k (A$463k), and subsequent Phase 2 valued at €600k (A$890k) of the 3 Phases
  - Successful Phase 1 wave tank testing completed in Spain. Phase 2 includes power take-off (PTO) and further tank testing, with the Phase running to June 2023
  - Validates CETO performance and reliability, and opportunity to deploy the tech at world-renowned European site in Phase 3
- **Technical progress**
  - New CETO captures nearly twice as much energy from waves through Advanced Controller and Rotary Electric PTO as compared to previously deployed CETO
- **Positions Carnegie as a Technology Provider with strategic partners**



Product Validation Roadmap

CETO Development Activities
Validated via EuropeWave ACHIEVE Project



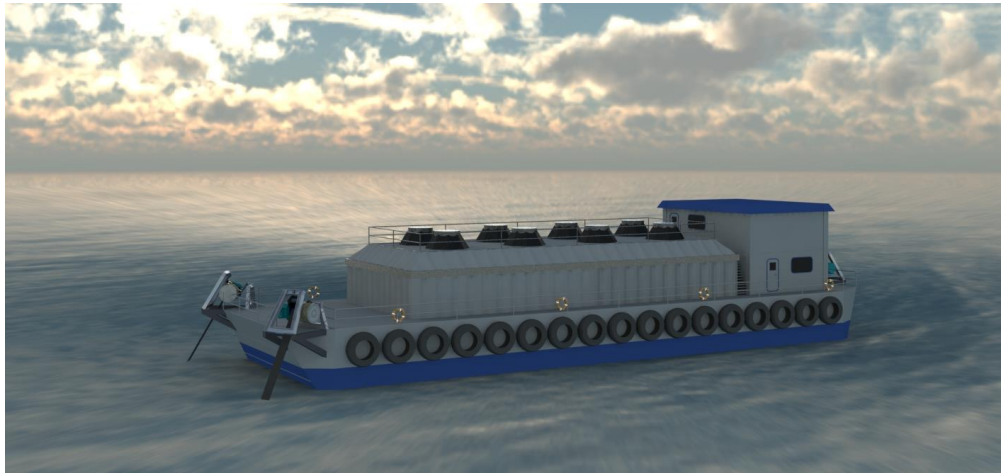
* CETO is being validated via CETO Wave Energy Ireland's participation in the EuropeWave ACHIEVE Project.. Phase 3 activities are subject to continued participation in the EuropeWave PCP Programme.

MoorPower® gaining traction

MoorPower Scaled Demonstrator

Technology for the sustainable management of fisheries and aquaculture

- **$3.4m MoorPower Scaled Demonstrator project**
  - Carnegie to design, develop, build and operate a scaled demonstrator of the MoorPower technology with Blue Economy CRC and leading partners
  - Design is nearing completion, followed by manufacture, onshore testing and operations in 2023
  - MoorPower provides sustainable supply of energy for marine industries, as in the aquaculture sector, reducing the reliance on diesel
  - Major aquaculture project industry partners likely to become first adopters
  - Planned Full Scale Demonstrator Project
- **Future hydrogen integration and battery opportunities**

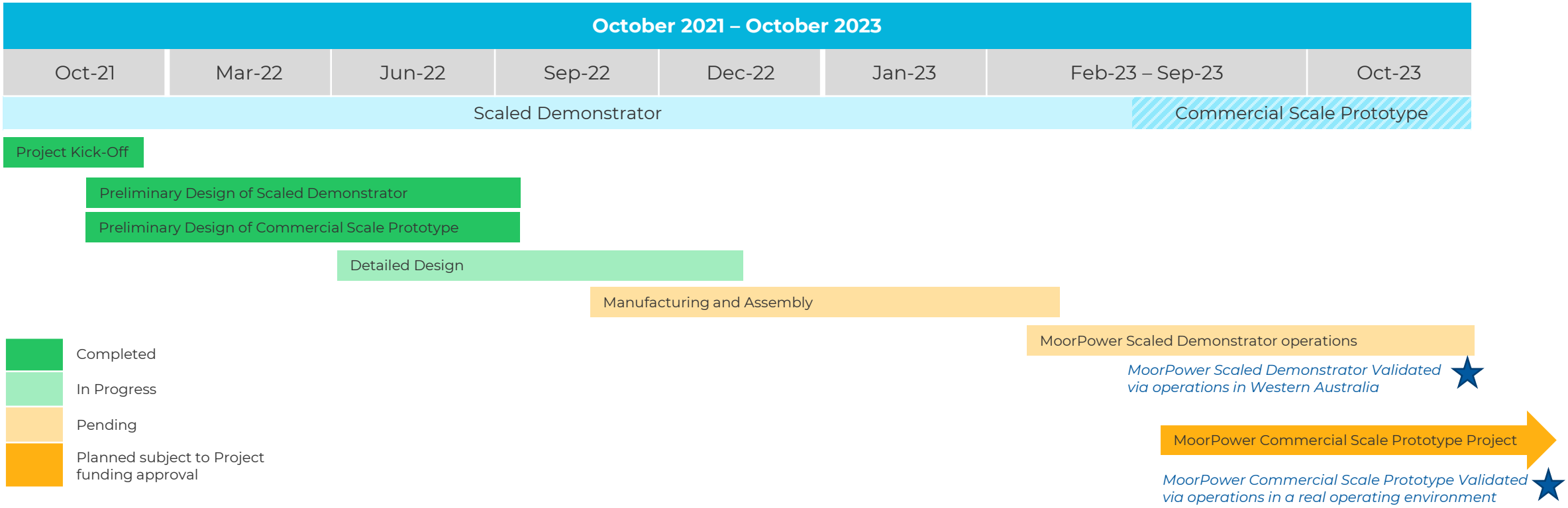


Scaled Demonstrator Partners

BLUE ECONOMY COOPERATIVE RESEARCH CENTRE
HUON AQUACULTURE
tassal
THE UNIVERSITY OF QUEENSLAND AUSTRALIA
AMCS AMC SEARCH
ACS AUSTRALIA
UNIVERSITY of TASMANIA
CLIMATE KIC AUSTRALIA KNOWLEDGE INNOVATION COMMUNITY
DNV

Product Validation Roadmap

MoorPower Development Activities
Validated via Scaled Demonstrator & Commercial Scale Prototype Projects



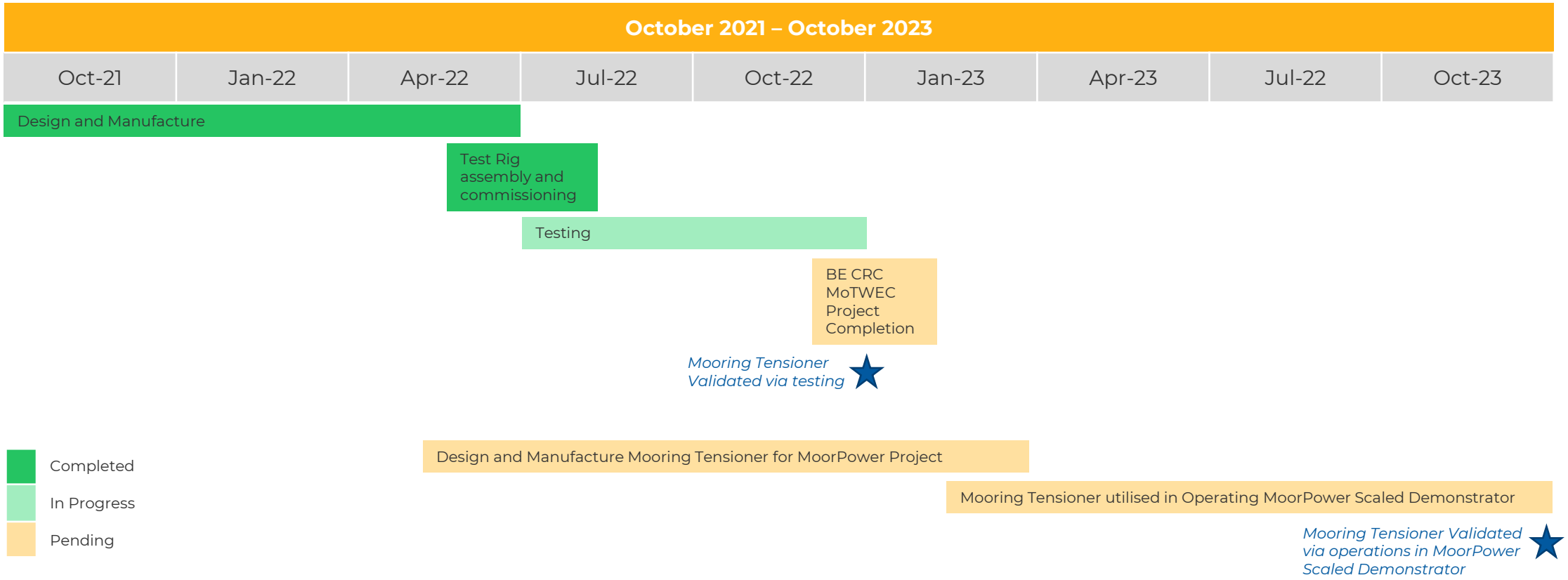
* MoorPower is being validated via the Scaled Demonstrator project (with existing support from the Blue Economy CRC and a consortium of partners) and a subsequent commercial scale prototype to be deployed in a real operating environment with an Aquaculture partner (which is subject to funding).

Product Validation Roadmap

Complimentary Products - Wave Predictor
Development Activities

Product Validation Roadmap

Complimentary Products – Mooring Tensioner
Development Activities



Portfolio of established assets

Technology & Products

- Leading position with CETO wave energy technology
- Numerous patents and considerable store of IP related to CETO
- Garden Island Microgrid - 2MW solar-battery, desalination plant and wave-ready grid connection
  - More than 4600 MWh of energy sold
  - > 3000 tonnes of carbon dioxide emissions avoided
  - Potential to improve services and optimise system
  - Discussions regarding future wave projects commenced
  - Revenues from power generation
- Three Australian wave sites – Fremantle, Garden Island and Albany

Investment highlights

1
Technological advantage

Unique competitive products to accelerate the adoption of one of the world's largest untapped renewable energy sources

2
Solid strategy for growth

Best in class team with strategy gaining traction, resulting in EuropeWave PCP and MoorPower projects

3
Strong partnerships

World class partnerships, including HPE and Hutchinson, to support the development and pathways to commercialisation

4
Global renewables market boom

Governments committed to zero carbon by 2050, supporting wave energy to become a key renewable energy resource

5
Only the beginning

CETO products to revolutionise power generation, producing clean energy and supporting global efforts toward decarbonisation

Thank You

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