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MARINEi

An introduction to Marine-i

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Marine-i enters a new phase

Vision: Marine-i provides leadership and a focal point to galvanise and support business-led and market-driven Research, Development and Innovation.

- The new programme is focussed on accelerating development of innovative product ideas
- Partnership organisations
- Builds on the success of the initial Marine-i Phase 1

Our Aim – to create a sustainable and innovative marine technology sector in Cornwall, where businesses can thrive and succeed in global markets well into the future

Our Mission – “The Marine-i programme should **prioritise** RD&I leading to **Marine Technology Processes, Products and Services** with the potential to have a **significant impact in the Low Carbon Energy markets and other growth areas within the Ocean Economy**, notably those associated with **new technology addressing the Clean Marine agenda and Coastal Adaptation.**” MI2 Strategic Partner Board



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The offer to businesses

- **Comprehensive RD&I support**
- **Pre-funded access to an exceptional range of test facilities**
- **Graduate placements to work in your business at a subsidised cost**
- **Outreach programme**
- **Increased profile for your business**
- **Grant support**

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Our targets

96 enterprises will receive support. We will deliver business assist of 12 hours where businesses can then be led to an RD&I activity. **26 innovation grants** will be supported, particularly in cross-over and emergent areas.

70 enterprises will receive non-financial support, receiving new knowledge on market sectors, knowledge exchange, access to partner data at workshops but not participating directly in RD&I

8 new enterprises will be supported in emerging technology sectors e.g. offshore energy, marine manufacturing, maritime operations and marine environmental technologies

£553,000 Private Match funding will be leveraged.

9 of the supported enterprises will achieve increases in employment, through higher engagement with the programme and through our placement scheme.

30 enterprises will be cooperating with research institutions and **8 enterprises will be supported to introduce new to the market products.**

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On track...



COMMUNITY
ENERGY PLUS



Falmouth Harbour
Commissioners



And more...

HydroWing Ltd.

TRIVANE

Acadmy

Falco Drone Technologies Ltd

Perpetual Research Consultancy Ltd

Supernaturehuman



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Examples of Marine-i Partner Expertise

Key areas

- Marine and offshore energy
- Marine technology
- Aquaculture technology
- Novel Mooring systems / component development
- Marine operations and maintenance strategies
- Autonomous marine systems
- Applied optimization
- Optimisation of Floating Platform design
- Health/condition monitoring

Key Subsectors

- Energy efficiency and generation
- Wind/Wave/Current loading
- Mooring design and analysis
- Reliability and statistical methods
- Material and mechanical behaviour
- AI and Data Science

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Examples of Marine-i Partner Expertise

Key Skills

- Analytical/computational modelling and analysis
- Experimental modelling and analysis
- Hydrodynamic experimentation
- Mechanical experimentation (performance characterisation, reliability and fatigue)
- Marine data measurement and analysis
- Environmental/Marine resource characterisation
- Optimisation
- Machine learning & artificial intelligence

Software Capabilities

- Ansys
- MATLAB
- Nemoh
- OpenFOAM
- Orcaflex
- WAMIT
- SWAN
- Python
- SolidWorks

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Examples of Marine-i test facilities



COAST Lab

The Coastal, Ocean and Sediment Transport (COAST) laboratory provides physical model testing with combined waves, currents and wind, offered at scales appropriate for device testing, array testing, environmental modelling and coastal engineering. This is a flexible facility with the capability to generate short and long-crested waves in combination with currents at any relative direction, sediment dynamics, tidal effects and wind.

Access to renewable marine energy risk and cost reducing test facilities

Through Marine-i, you can have access to the testing facilities at the Offshore Renewable Energy Catapult (OREC), which is the UK's flagship technology innovation and research centre for advancing wind, wave and tidal energy. You can have access to an open access and fully controlled onshore saltwater environment to perform verification activities, reliability and performance appraisals of new mechanical and electrical subcomponents and whole systems.



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Examples of Marine-i test facilities



DMaC

The Dynamic Marine Component Test Facility. This is a purpose-built test facility to investigate the mechanical reliability of marine components in harsh offshore conditions.

FaBTest

Located in Falmouth Bay, FaBTest is a nursery ocean facility for demonstrating marine technologies. It enables developers to test technologies, components, moorings and deployment procedures in a moderate wave climate, at low cost



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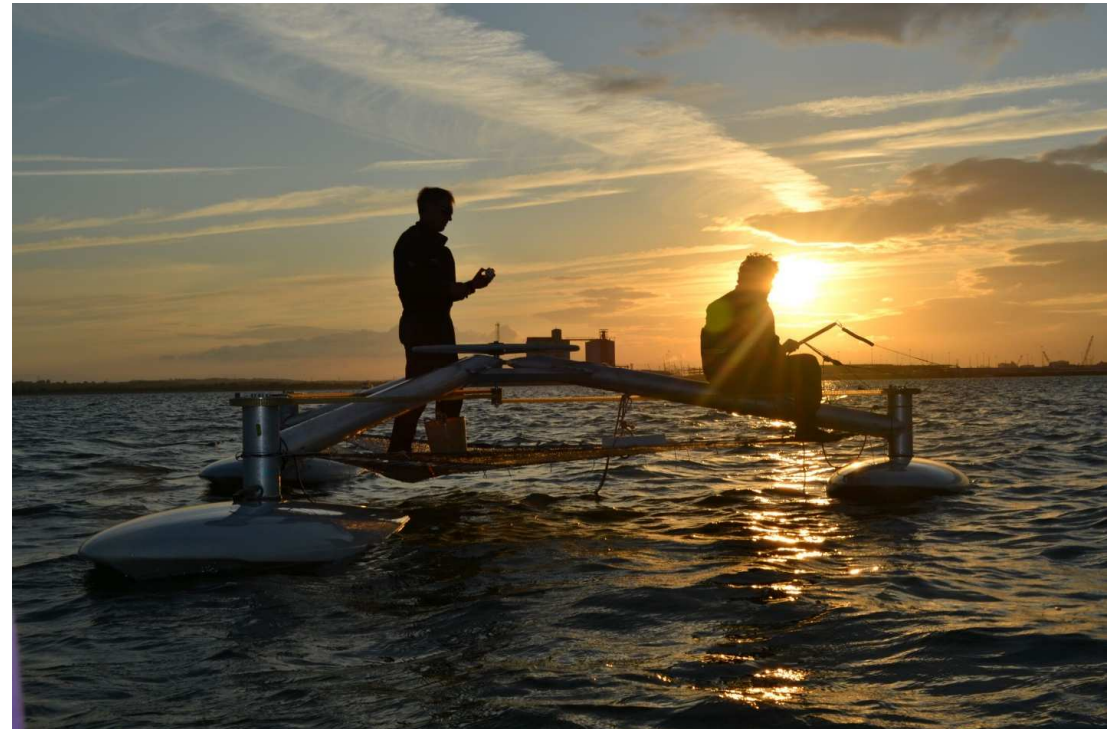


Accelerating business growth

The world class RD&I expertise and the outstanding test facilities available through Marine-i have already enabled:

- Many exciting new product developments
- Opening global market opportunities for Cornish businesses.

We now aim to build further on this success and help more businesses accelerate their growth.



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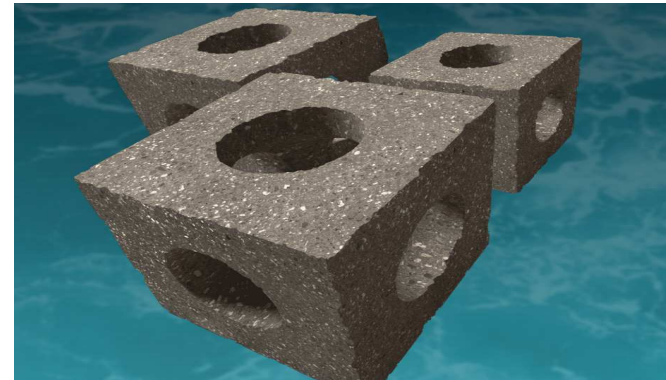
We aim to continue our success with Marine-i

“The whole experience of working with Marine-i has been extremely positive. It is proving to be a valuable catalyst in helping us along our journey towards commercialisation.”

- Tom Birbeck, ARC Marine

“The success that we have achieved with these trials at COASTLab and FaBTest has enabled us to take a significant step towards commercialisation of our new technologies.”

– Craig Whitlam, Marine Power Systems



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Thank You

www.marine-i.co.uk

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