

# **Marine Sector factsheet**

Plymouth is a global centre of excellence for marine science and technology with one of the largest clusters of expertise in Europe.

This extends across marine technology, renewables, cruise and leisure marine to boatbuilding, shipping and marine engineering with marine autonomy recognised by the Department for Business and Trade as a High Potential Opportunity for inward investment and export.

#### **Sector Overview**

- 20,110 FTE jobs in marine and defence (2021)
- £1214m GVA in marine and defence (2021)
- £60,080 GVA per FTE (2021)

# **Specialist Companies**

- ABF
- Applied Automation
- ARGANS
- Atlantis Marine Power
- Babcock International Group
- Brittany Ferries
- Fugro
- Interish
- Manuplas
- Marine Al
- Marine Biological Association
- Maritime & Coastguard Agency
- Mashfords
- MSubs
- Ocean Electric Power
- Plymouth Boat Trips
- PML Applications
- Princess Yachts International
- Sonardyne
- Thales UK
- Turnchapel Wharf
- WITT

# **Organisations**

## Plymouth and South Devon Freeport

Working with the Department of Business and Trade, a dedicated team of experts will showcase the Plymouth and South Devon Freeport to global investors and businesses who fit the criteria to expand or relocate to the region. Businesses that are part of the Freeport can take advantage of a range of tax and customs benefits and incentives to support growth, innovation and investment in the South West. The Plymouth and South Devon Freeport will:

- Enable new employment land to be bought forward at the three sites of South Yard, Langage and Sherford
- Establish a Freeport 'campus' utilising the region's stateof-the-art assets and facilities in marine and defence innovation
- Provide a major expansion plan for Princess Yachts
- Include £29m investment from local councils
- Leverage £250m private sector investment

■ Deliver over 3,500 jobs

The South Yard tax site is the centrepiece of the Freeport's innovation hotbed and builds on state-of-the-art marine and defence assets and facilities available within Plymouth and the wider area rapidly making the Freeport a global centre of excellence for the testing, development and manufacturing of latest technology and specific sub-sector specialisms. With a strong net zero focus, these include Marine autonomy and decarbonisation, Digital oceans, Smart ports and shipping, Maritime cyber-security, Offshore renewable energy support solutions, Defence mission modules and small satellite fabrication. To find out more visit, Freeport - Plymouth and South Devon Freeport (pasdfreeport.com)

#### **Maritime UK South West**

Maritime UK South West is a public, business, research partnership which brings together the breadth of ocean economy to create a world leading ocean technology cluster. It enables innovation and collaboration, finding the right business support and skills and driving strategic development and investment. Maritime UK South West aims to champion and promote our sector, internally, nationally and abroad, driving clean growth and building on our centres of excellence in offshore renewables, marine autonomy and clean ocean technology.

## Plymouth Marine Laboratory (PML)

PML is a world leader in the field of marine research, committed to the delivery of impactful, cutting-edge environmental and social science in support of a healthy and sustainable ocean. PML is an independent and impartial marine research laboratory, and registered charity, with a track record of over 40 years of innovative and globally recognised science on the interactions between the marine environment and society. It is internationally recognised for being at the forefront of socio-economic marine environmental research using a combination of traditional and advanced scientific methods, utilising the latest in digital technologies such as Artificial Intelligence (AI) and machine learning to help efficiently collect, visualise and interpret increasing quantities of environmental and biological data.

## PML Applications Ltd.

PML Applications Ltd. is a uniquely diverse global marine environmental consultancy, providing scientific research, consulting and training services to help understand the marine environment's impact on business and on the marine environment itself. It accelerates new technologies for a sustainable blue economy. It's Centres of Excellence in Marine Biofouling and Corrosion, Coastal Technologies, Geospatial Applications and Environmental Solutions have built a reputation for independence and impartiality, with world-class testing facilities and expertise dedicated to bridging the gap between research and real-world practical solutions.



# The Marine Biological Association (MBA)

The MBA is one of the world's longest-running societies dedicated to promoting research into our oceans and the life they support. Since 1884 it has provided a unified, clear, independent voice on behalf of the marine biological community and has a growing membership in over 40 countries. The MBA is based in Plymouth and currently employs over 100 members of staff providing cutting-edge independent marine research. MBA scientists deliver an internationally-renowned programme of scientific research and resident workers and visitors alike enjoy the high quality facilities and services provided. The MBA also boasts:

- Hosting seven Nobel Prize winners
- Operates the Continuous Plankton Recorder (CPR)
  Survey, which is the most geographically extensive and longest running marine biological survey in the world.

## Marine Research Plymouth

Bringing together the University of Plymouth, the MBA and PML, Marine Research Plymouth hosts the largest number of marine scientists anywhere in the UK.

# Plymouth Fishing and Seafood Association

The fishing industry in Plymouth lands £16 million worth of fish each year, and accounts for around 21% of the entire English fishing fleet by jobs-supported. The Plymouth Fishing and Seafood Association (PFSA) is a forum for the fishing industry in Plymouth and provides a collective voice that facilitates open discussion for this diverse sector. The PFSA promotes a sustainable future for Plymouth's fishing industry with an environmentally sustainable and diverse local fishing industry which contributes to the economic and social regeneration of the Plymouth fishing community whilst actively contributing to protecting the marine environment and marine biodiversity, reducing carbon emissions and enabling local fishing communities to adapt to climate change.

#### **Skills**

## **University of Plymouth**

The University of Plymouth is one of the top 5 universities for teaching Geology, Environmental, Earth and Marine Sciences in the UK. Plymouth boasts one of the most prestigious clusters of marine teaching, research and educational organisations in Europe, and some 3,000 marine staff, researchers and students are represented by the University's Marine Institute which is the first and largest such institute in the UK.

#### The Marine Building

Located on the University campus, the Marine Building houses state-of-the-art research facilities, which are used to recreate real world marine environments and conditions, exchange knowledge for business innovation and growth, create renewable energy solutions and help the world adapt to climate change.

It's home to the Coastal Ocean and Sediment Transport (COAST) laboratories, the Marine Navigation Centre, the Marine Innovation Centre and the multidisciplinary Marine Institute whose facilities include:

- One of the most advanced wave tank and testing facilities in the country
- Hydrodynamic test laboratory with tidal and wave test basins
- A ship simulator which uses advanced computer imaging, projection, and a 270-degree screen
- Dedicated technical support and office facilities for up to 150 marine institute researchers and technology developers
- The Cyber SHIP Lab that offers a unique, hardwarebased maritime cyber security research and development platform
- The Dynamic Positioning Simulator which simulates, tests and optimises marine operations

# Centre for Decarbonisation and Offshore Renewable Energy (C-DORE)

C-DORE brings together a critical mass of leading research and expertise from across the University of Plymouth. Through co-creation and collaboration with partners from business, government and other key communities, it aims to be a whole-system approach to solutions-oriented research, accelerating sustainable developments in decarbonisation and renewable energy.

#### **Marine Station**

A landmark £4.65 million waterfront Marine Station, at Coxside, with lecture facilities overlooking the sea, which serves as a base for marine expeditionary work and is also a scientific diving centre, has a sea water aquarium, wet labs and the University's fleet of boats. Among them is a

dedicated oceanographic research vessel, Falcon Spirit, a 14 metre aluminium catamaran configured as a flexible platform for teaching and research which has capacity for 14 crew members, and can work up to 60 miles from port. The University has significant underwater exploration capacity through its state-of-the-art Remotely Operated Vehicles which can explore, film in HD and conduct operations at depths in excess of 500m.

## **City College Plymouth**

City College Plymouth is home to the Centre for Higher Technical Innovation and Maritime Skills. A dedicated maritime skills centre located in Oceansgate, fully kitted with modern engineering and manufacturing equipment to ensure learners gain hands on experience in the learning environment and are fully prepared to take this learning to the workplace.

Working closely with industry partners, the College runs apprenticeships and university-level courses in naval architecture, marine engineering, boat building, marine autonomous vehicles and marine science.

### **SeaRegs**

A leading provider of mariner courses applicable to any boat operators at all levels, Master through to Crew.

### **Fugro**

Operates a state of the art training facility in Plymouth providing Remote Operated Vehicle (ROV) training to its own and external staff. The Plymouth site is one of two ROV training centres operated by Fugro the second is based in Singapore. The ROV introduction training course is the first to be recognised by the International Marine Contractors Association (IMCA).

# **Western Maritime Training**

A bespoke provider of commercial maritime training courses and bespoke maritime courses for companies and individual mariners. Incorporated in 1990, WMT have been delivering first class maritime training in the South West and globally, for over 30 years.

# **MLA College**

MLA College is a global, award-winning Higher Education provider specialising in the delivery of UK distance learning degrees, predominantly for the marine and maritime sector.

Founded in 2012, MLA College was initially based within the University of Plymouth, a partner institution, but is now a registered Higher Education Institution in England.

#### **Places**

## **Oceansgate**

Oceansgate occupies a 35 hectare site on the southern edge of Devonport Dockyard and forms a unique complex of industrial buildings, and docks for commercial use with direct deep water access. It brings together marine businesses to create a world-class hub for marine industries in Plymouth. Oceansgate is being developed in three phases: phase I completed in April 18 with tenants including The Maritime Coastal Agency, Blue Ocean Monitoring and Coastline Marine Services. Phase 2 was completed in March 2021 and offers quality office and industrial space. The site was fully let by October 2021 and hosts some key businesses and organisations including ESL Group's Space and Defence Solutions Ltd, Babcock Integrated Technology Ltd, Relay Engineering Ltd and City College Plymouth's South West Institute of Technology. Phase 3 which is due to begin in late 2023 will enable availability of docks, deep water jetties, land and a bespoke innovation centre.

**Turnchapel Wharf** 

Turnchapel Wharf is a 14 acre commercial waterfront business park on the Cattewater in Plymouth. As the home of UK maritime autonomy, a number of local, national and international businesses use Turnchapel Wharf's waterfront location for trials and testing, working alongside companies who are based at the site, such as Thales, Marine Al and

Fugro. With over 30,000sqft of modern offices, as well as workshops, deepwater pontoon berthing, slipway, boat lifting facilities and state-of-the-art maritime autonomy control centres, Turnchapel Wharf is at the cutting-edge of marine technologies. Based in the Cattewater, Turnchapel Wharf provides easy, full-tide access to Plymouth Sound and beyond.

## **HM Naval Base Devonport Plymouth**

The largest naval base in Western Europe, Devonport has been supporting the Royal Navy since 1691. The vast site covers more than 650 acres and has 15 dry docks, four miles of waterfront, 25 tidal berths and five basins. The base employs 2,500 Service personnel and civilians, supports around 400 local firms and generates around ten per cent of Plymouth's income.



#### **Initiatives**

#### **Ocean Futures**

Ocean Futures will position the UK as a global leader in advanced maritime technologies, by accelerating the work already underway in the South West region and the unique physical environment and state-of-the art capabilities of the Smart Sound, around which industry and academic expertise have coalesced.

It draws in a wider, world-class ecosystem of SMEs and micros alongside assets from across the South West, including but not limited to: the UK Hydrographic Office, Met Office, National Physical Laboratory, the Marine Biological Association, Plymouth Marine Laboratory, the Universities of Plymouth and Exeter, the Science Parks, Enterprise Zones and world-class ocean technology test facilities across Cornwall, Devon, Somerset and Dorset. Ocean Futures is designed to form a key pillar of the country's ambition to be a global marine and maritime science and innovation superpower, at the heart of a sector projected to be worth \$3trillion globally by 2030.

## **Smart Sound Plymouth**

Smart Sound Plymouth is the UK's premier proving area for designing, testing and developing cutting edge products and services for the marine sector. This multi-million pound development provides access to first class off and onshore facilities plus award-winning marine science and technology expertise. Smart Sound is co-ordinated facility partnered by five organisations boasting considerable expertise in autonomous systems, environmental sensor technologies, alternative propulsion, advanced manufacturing and cybersecurity. Funding was secured to build a cutting edge communication system which is the UK's first 5G testbed for marine innovation, providing high speed communications on the water and connecting the existing network of sensors, which includes scientific data buoy networks and autonomous vessels. Providing access to a unique combination of:

- State-of-the-art offshore and onshore facilities
- Some of the world's foremost marine science and technology organisations

- I,000 sq kilometres of authorised, de-conflicted water space
- 4G and 5G mesh connectivity

The Smart Sound area will soon be covered by a subsurface communications network delivered by UoP in partnership with Sonardyne.

## **Plymouth Sound National Marine Park**

Plymouth Sound National Marine Park is the UK's first national marine park. Plymouth Sound is one of the world's most important and visually stunning natural harbours. It has multiple designations for protected habitats and supports over 1000 species of fish and other marine animal life. It is home to HMNB Devonport, the largest naval base in Western Europe, commercial ports, a substantial national fishing fleet, international fish market, commercial diver training, a global hub for marine leisure industries and an internationally important marine research cluster. It is a historic tourist destination; Plymouth and its people have played a vital role in the development of Europe and the Americas. Nowhere could be more deserving of special recognition at a local or national level. So many pioneering voyages of discovery have set sail from Plymouth that it is natural for Plymouth to be considered as the UK's first National Marine Park.

#### **Marine Leisure**

The leisure marine sector comprised mostly of SMEs. The UK's growing superyacht industry is a globally recognised and a significant sector. The leisure sector mixes service and manufacturing, from surveyors and charterers to specialist equipment manufacturers and three world leading marine leisure clothing brands. Many leading international yacht designers are based in the UK including the world renowned Princess Yachts International, who were first established in Plymouth in 1965. Today Princess shipyards cover an area of over 1.1 million square feet. Plymouth has also hosted many global yachting events such as the Great Britain Sail Grand Prix, Vendee Globe, Rolex Fastnet, Bakerly Transat and America's Cup. Plymouth boasts the second highest number of Gold Anchor marinas in the UK.

# **Take Action**

To find out more about what Plymouth offers the marine sector, or to discuss how our business support service can help meet your business needs, please contact:



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