

## Marine and Defence Sector Fact Sheet

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

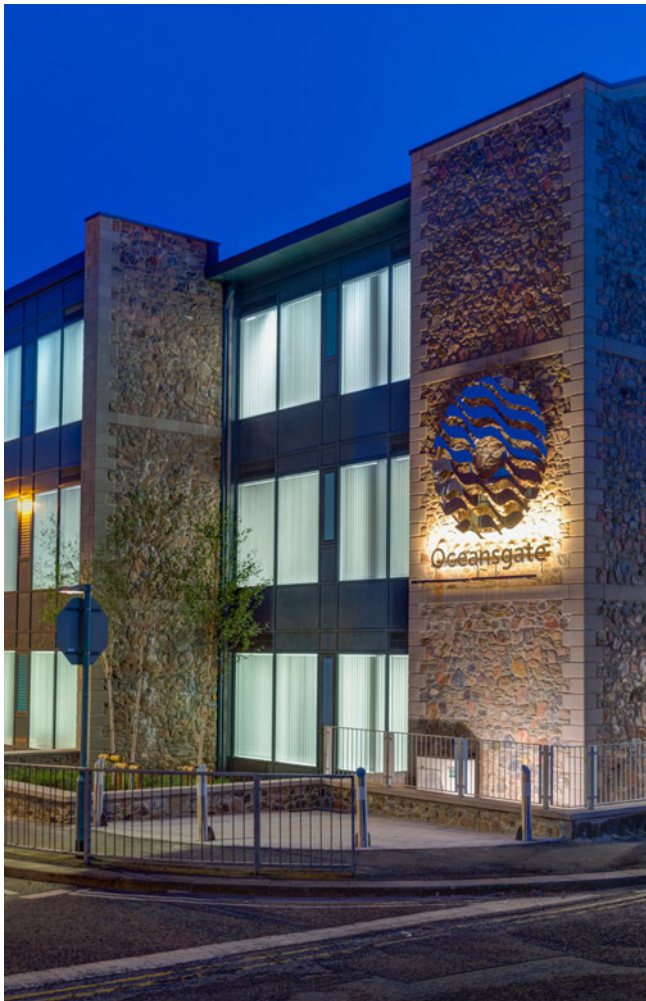
**This extends across marine technology, renewables, cruise and leisure marine to boatbuilding, shipping and marine engineering.**

### Sector Overview

- 17,108 FTE jobs in marine and defence (2017)
- £993m GVA for the marine and defence industries (2017)
- This includes 11,600 FTE jobs and £685m GVA at HM Naval Base Devonport
- £58,043 GVA per FTE (2017)
- £30,500 average advertised salary (2019)

## Specialist Companies

- ADPS (Auto Dynamic Positioning Services)
- Applied Automation
- ARGANS
- Atlantis Marine Power
- Babcock International Group
- Fugro
- Interish
- Manuplas
- Marine Learning Alliance
- Mashfords
- MSubs
- Ocean Electric Power
- PML Applications
- Princess Yachts International
- Sonardyne
- Thales UK
- Turnchapel Wharf
- WITT



## Oceansgate

Oceansgate occupies a 35 hectare site on the southern edge of Devonport Dockyard and forms a unique complex of industrial building 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 will be developed in three phases: phase one completed in April 18 with tenants including The Maritime Coastal agency, Trend Marine, Surejust and Lang and Potter. Phase 2 started construction in May 2019 and will develop new office and industrial space, and phase 3 will enable availability of docks, deep water jetties, land, offices and workshops.

## The Marine Business Technology Centre (MBTC)

The MBTC is an EU Funded support programme designed for Devon-based marine businesses to develop the next generation of technology.

Based in Endeavour House at the Oceansgate Marine Enterprise Zone in Devonport, the MBTC gives clients access to the Plymouth Smart Sound proving zone, funding programmes, research and development support and links to other commercial collaborative partners to aid the production of cutting edge marine solutions.

## Smart Sound Plymouth

Co-ordinated through the Marine Business Technology Centre, Smart Sound Plymouth is a partnership between five organizations boasting considerable expertise in autonomous systems, environmental sensor technologies, alternative propulsion, advanced manufacturing and cybersecurity.

The area's impressive variety of water depth, sea states and weather conditions is perfectly suited for conducting sea trials, including sub-surface trials with access to offshore water depths of 75m, providing the ideal environment for multiplatform mission operations.

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
- Nearly a 1,000 sq kilometres of authorised, de-conflicted water space
- Funded support for eligible businesses

## HM Naval Base Devonport

Plymouth is home to the largest Naval Base in Western Europe.

Devonport Dockyard directly employs around 11,600 workers, made up of roughly 5,000 military and 6,600 civilians.

The activities undertaken at the Naval Base and Dockyard generate £685 million in GVA and is the only facility in the UK licensed to undertake critical competence in the deep maintenance of nuclear submarines.

Of equal importance is the valuable contribution to national defence made by the vessels docked at Devonport.

## University of Plymouth

The University of Plymouth is world-renowned for its research, teaching and training across the marine sciences.

There are around 2,600 students enrolled across a variety of marine-related programmes in the School of Biological and Marine Sciences, and the School of Engineering.

The University is leading the ORE (Offshore Renewable Energy) Supergen consortium, a multi-million pound funded programme to bring together a network of academic, industrial and policy stakeholders to champion the sector.

## The Marine Building

Located on the University campus, the Marine Building houses state-of-the-art research facilities, positioning Plymouth as a global centre for marine energy research.

These 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.

## Marine Station

The University has a range of facilities that are unmatched by almost any other university in the country, including a waterfront Marine Station, at Coxside, home to a scientific diving centre, aquaria, wet labs and the University's fleet of boats. Among them is a dedicated oceanographic research vessel, Falcon Spirit, 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.

## Plymouth Marine Laboratory (PML)

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 collaborates in research projects across the world, in addition to which its scientists contribute to policy development, public understanding of science, capacity building in developing nations, as well as the application of science.

PML's £25 million pound research facility on the Plymouth Hoe is home to state-of-the-art facilities ranging from the world's fastest atomic force microscope that allows scientists to see individual strands of DNA to a dedicated laboratory for the testing and development of pioneering scientific sensors and platforms.

It manages one of the most comprehensive and longest shelf sea observatories in the world, is home to a global Earth observation processing capability and a recognised global leader in marine ecosystem and coastal ocean hydrodynamic modelling. It is internationally recognised for being at the forefront of socio-economic marine environmental research.

## PML Applications Ltd

PML Applications Ltd is the gateway to accessing the latest marine research and technology for commercial use, providing outstanding marine consultation and services to a global client base. It is home to three Centres of Expertise working with industry such as shipping, marine renewable energy, oil and gas, shipping, aquaculture, ballast water and classification.

Through the Centres for Ballast Water Centre and Marine Biofouling and Corrosion it focuses on biofouling management, the development and testing of antifouling technologies, development of innovative new ballast water treatment systems, and testing ballast water systems for efficacy, regulatory type approval and compliance with international and US regulations.

Communicating geospatial data effectively is what its third Centre of Expertise specialises in and through its interactive data visualisation tool is already proving very effective with industry clients, as well as with several EU funded projects. Services include ocean colour, water quality, aquaculture and fisheries management, ship, oil spill and internal wave detection, data management and visualisation such as for marine planning and protection, and airborne data processing.

PML Applications Ltd is a wholly owned trading subsidiary of Plymouth Marine Laboratory.

## The Marine Biological Association (MBA)

The MBA is the longest established marine laboratory in the UK. Since its foundation in 1884, the MBA at Plymouth has had a rich history and has seen many highly significant scientific discoveries at its Citadel Hill laboratory.

Today, MBA scientists deliver an internationally-renowned programme of scientific research that is highlighted on these pages. Resident workers and visitors alike enjoy the high-quality facilities and services that we can provide. The MBA conducts, promotes and supports scientific research into all aspects of life in the sea.

The MBA has hosted seven Nobel Prize winners.

The MBA operates the Continuous Plankton Recorder (CPR) Survey, which is the most geographically extensive and longest running marine biological survey in the world.

## Marine Academy Plymouth

Opened in 2010 for 11 to 18 year olds, and is the first of its kind in the UK.

Specialises in the marine environment, encompassing science and engineering, and focuses on employment pathways which are integral to a marine environment.

## City College Plymouth

The College's Regional Centre of Excellence for STEM provides state-of-the-art facilities for the marine sector.

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.

## Fishing Industry

The fishing industry lands £16 million worth of fish in Plymouth each year, and accounts for around 21% of the entire English fishing fleet by jobs-supported.

Plymouth Fish Market consistently features in the top 3 ports in England, by landed weight and value.

## Marine Leisure

Princess Yachts International, one of the leading motor yacht manufacturers in Europe, builds its M Class yachts in Plymouth.

Plymouth has also hosted many global yachting events such as Vendee Globe, Rolex Fastnet, Bakerly Transat and America's Cup.

Plymouth boasts the second highest number of Gold Anchor marinas in the UK.

## Turnchapel Wharf

A 14 acre marine business park on the Cattewater in east Plymouth.

As a former MOD site, it has undergone a major transformation into a modern, thriving space providing offices, workshops and warehouses alongside 200m of deep water berthing, and is now home to a range of marine and blue tech businesses.

---

## 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:

### Enterprise and Inward Investment Team

[invest@plymouth.gov.uk](mailto:invest@plymouth.gov.uk)   [investplymouth.co.uk](http://investplymouth.co.uk)

