MARINE ENERGY AND OFFSHORE WIND
SOUTH WEST COMPANY DIRECTORY

The growth of wave, tidal and offshore wind energy represents a tremendous economic opportunity for the UK. The recent Offshore Renewable Resource Assessment and Development (ORRAD) project found that the south west was capable of delivering 9.2 GW of offshore wind and marine renewable energy by 2030. The south west also has some fantastic and innovative businesses based in the region that are already making a vital contribution to the marine energy sector. The region is home to a large number of wave and tidal technology developers, research organisations and consultancy firms. It also has a strong engineering and marine science capability based around its excellent deep-water ports. In the area of offshore operations, south west companies are already providing expertise across the UK and Europe in the deployment and servicing of marine energy and offshore–wind technology. This guide gives an overview of these companies and highlights the capabilities that the south west of England can offer.

Round 3 of the UK offshore wind deployment programme represents a step change in the scale and acceleration of offshore wind construction. Two of the Round 3 zones are in South West waters - the 1.5 GW Atlantic Array in the Bristol Channel is being developed by Swindon based RWE npower renewables, while the 0.9 GW Eneco Wind Park, off the coast of Dorset, is being developed by the Dutch utility Eneco Wind UK Ltd. The South West is in a very strong position to reap the economic benefits of offshore renewables. Regen SW will be working closely with RWE npower renewables and Eneco, and our south west businesses, to ensure we have the capabilities, people and infrastructure to support offshore wind development in the region.

For information on companies go to www.regensw.co.uk/directory
The south west of England has become a centre for wave and tidal device developers. Many of these have strong associations with the region’s universities, while others have been attracted by its engineering skills and marine expertise.

2010 saw a number of key milestones for south west based developers. Marine Current Turbines's Seagen device has generated 2 GWh of electricity since installation. Tidal Generation Ltd, owned by Rolls Royce, installed a 500kW device at EMEC. Wave energy developers Ocean Power Technologies, Fred Olsen and OWEL were successful in attaining funding in the Technology Strategy Board to support collaborating projects with companies in the south west.

Tidal energy developers
- Marine Current Turbines, Bristol
- Tidal Generation Ltd, Bristol
- The Severn Tidal Reef Project, Cornwall
- Aquascientific Limited, Exeter

Project developers
- Ark Energy Ltd, Bristol
- Ocean Electric Power, Plymouth
- Seawind UK Ltd, Devon
- Wave Hub, Hayle

Wave energy developers
- Checkmate SeaEnergy Ltd, Wiltshire
- Dartmouth Wave Energy, Devon
- Eنبble Energy, Bristol
- Offshore Wave Energy Ltd (OWEL), Cornwall
- Ocean Power Technology, US/Warwick

Technology partners
- A&P Falmouth, Cornwall
- Babcock Integrated Technology Services, Bristol
- IT Power, Bristol
- Mojo Maritime, Cornwall
- QinetiQ, Bristol
- Rolls-Royce Plc (Marine), Bristol
- Supacat, Devon

Installed and commissioned in 2010, Wave Hub is the world’s largest test site for wave energy devices.

Wave Hub offers a grid-connected and consented area of sea with an excellent wave climate, backed up by world-class research, excellent port infrastructure and an established supply chain in south west England.

Installed in 2010, Wave Hub has a 20MW capacity for array testing with a 50MW upgrade potential. The ability to connect arrays of devices is unique and is a critical step towards commercialisation of technology.

The site is located 16km off the north coast of Cornwall, (North North East of St Ives) and is connected to the grid network at Hayle by a 25m cable.

Discussions are underway with a number of wave device developers including Ocean Power Technologies, OWEL and Fred Olsen.

The Wave Hub team are based in Hayle and are working closely with Regen SW, PRIMaRE and the local supply chain companies.

www.wavehub.co.uk

For information on companies go to www.regensw.co.uk/directory
South West England has excellent universities specialising in marine sciences, engineering and environmental sciences. Plymouth, Exeter, Bristol and Bath universities are all active in marine energy research in collaboration with industry partners.

University of Bristol’s Advanced Composites Centre and University of Bath’s Centre for Power Transmission and Control are using knowledge base built upon traditional industries, applying them to emerging technologies.

For information on companies go to www.regensw.co.uk/directory

The Peninsula Research Institute of Marine Renewable Energy (PRIMaRE), a collaboration between the universities of Exeter and Plymouth, has received over £12m to fund a broad range of research in marine energy.

PRIMaRE researchers are covering a range of topics vital to the development of both wave and tidal energy. This includes:

- Resource characterisation
- Marine renewable energy systems
- Environmental and biodiversity impacts
- Safe operations and navigational risk
- Underwater and surface electrical systems
- Socio-economic factors

PRIMaRE academics have been working closely with Wave Hub and have been on site surveying the biodiversity to put together a base layer of data to understand the impacts of wave energy devices. The Institute has access to a number of facilities to aid research.

The South West Mooring Test Facility and Dynamic Marine Component Test Facility are tailor made to deliver reliability and risk control for developers.

A unique wave tank facility is currently under construction at a new £18m marine building at the University of Plymouth.

For information on companies go to www.regensw.co.uk/directory
Alongside the universities and technology developers, the south west hosts a range of marine energy, environmental and specialist consultancy firms. This includes a number of world-leading specialist renewable energy consultancies such as GL Garrad Hassan, BVG Associates, Wardell Armstrong, Pure Energy Professionals and Zero Carbon Marine.

Together these firms provide a wide range of support services offering valuable insight, resources, expertise and specialist skills. So whether it’s conducting an environmental impact assessment or initial studies into marine energy projects, renewable energy companies will find the support they need in the region.

### Multidisciplinary consultancies
- Arup, Bristol
- Buro Happold Ltd, Bath
- BVG Associates, Swindon
- Capita Symonds, North Somerset
- Carrillian, Bath
- Frazer Nash Consultancy, Plymouth
- Halcrow Group Ltd, Exeter
- Hydroyd Group Ltd, North Somerset
- John Pepper Consultancy, Bristol
- M+W UK Ltd, Wiltshire
- Parsons Brinckerhoff, Bristol
- Qinetiq, Devon
- RPS Energy Ltd, Devon
- Scott Wilson, Bristol
- Worley Parsons, Bristol
- WYG Group, Bristol
- Xype, Bristol

### Environmental consultancies
- ACS Environmental Testing Ltd, Dorset
- AMA Ltd, Exeter
- Ambios Ltd, Somerset
- APEM Ltd, Dorset
- Aquarius Marine Group, Somerset
- Aquanatics Ltd, Devon
- Blom Aerofilms, Devon
- Boston Marine Consultancy, Devon
- Caleb Group, Gloucestershire
- Camco, Wiltshire
- Climate Change Matters, Devon
- CMS Ltd, Dorset
- Coastal Research, Devon
- Coastal Science Ltd, Devon
- Coastline Surveys Ltd, Cornwall
- Ecospan Environmental, Plymouth
- ENVIRON UK Ltd, Devon
- Fathoms Ltd, Somerset
- Geoscience Ltd, Cornwall
- Insight Marine Projects Ltd, Cornwall

### Renewable Energy Specialists
- Marine Ecological Surveys Ltd, Bath
- MSE Millennium Science & Engineering, Gloucestershire
- Nicholas Pearson Associates, Bath
- Pöyry Environment, Plymouth
- Risk Mitigation Geoservices Ltd, Somerset
- Spalding Associates, Devon
- Swathe Services, Cornwall
- Tamar Consulting, Cornwall
- Terence O’Rourke, Dorset
- B9 Energy, Cornwall
- Chris Rudge Renewable Power, Devon
- Ecosulis, Ltd, Somerset
- GL Garrad Hassan, Bristol
- NaturalWatt Ltd, Devon
- Nuon UK Ltd, Cornwall
- Pure Energy Professionals, Cornwall
- Wardell Armstrong Ltd, Cornwall
- Windpower & Co, Cornwall

### Off-shore & Renewable Consultancies
- IT Power Ltd, Bristol
- Marine Energy Matters, Devon
- Ocean Electric Power, Plymouth
- Project Management Support Services, Bath
- Wind & Wave RE Consultants, Cornwall
- Zero Carbon Marine, Devon

For information on companies go to [www.regensw.co.uk/directory](http://www.regensw.co.uk/directory)
Marine engineering is concentrated around South West England’s hub ports of Plymouth, Falmouth, Bristol, Portland and Appledore. Bristol has also become a centre for high-tech industries, especially related to the aeronautical industry. Established engineering companies such as A & P Falmouth Ltd and Babcock Marine Ltd have traditionally supplied to the defence industry and are looking to emerging markets such as marine energy.

Throughout the region there is also a wide variety of fabrication, precision, electrical and mechanical engineering companies. From super yachts to nuclear submarines the south west boasts world class marine engineering capability, and many of these companies are now diversifying into the renewable energy sector.

For information on companies go to www.regensw.co.uk/directory
The South West of England is at the forefront in the field of composite technologies both in the marine and aerospace sectors. Major Aerospace companies including Airbus, Rolls-Royce, GE Aviation and GKN have bases in the region and are investing heavily in composite research and manufacturing facilities.

For example, Dorset based Norco GRP has been contracted by Atlantis Resource Corporation to manufacture the replacement blades for their demonstrator tidal stream for deployment at EMEC. Pipex, based in Plymouth, have been designing and testing a new HDPE (High Density Polyethylene) pipework system specifically for use in offshore wind applications.

The National Composites Centre (NCC) will open in 2011 at Bristol & Bath’s Science Park SPark. It will provide manufacturing facilities for composite companies, a hub for the UK’s composite manufacturing industry, coordination of a network of regional centre, direction and focus for research and collaboration.

The South West Composites Gateway is a unique partnership between the regions further education institutions to ensure that we have the engineers and skills required as composite materials increasingly replace metallics in marine and aerospace applications.

For information on companies go to www.regensw.co.uk/directory
The key components to support the marine energy industry are all found in the region, including: hydraulics and pump manufacturers, electrical equipment and connectors, composites and plastics. South West England also has a broad base of companies providing specialist marine equipment such as mooring, navigation, marine electronics, surveying and monitoring equipment.

Several of these world-class companies are already working in the marine energy sector. Others are concentrated in the aeronautical, defence and oil and gas industries. All are now in a position to support the growth of renewable energy and are ready to bring their expertise and products to help accelerate marine energy development.

For example, Armada Hydraulics, Falmouth have begun to work in the tidal sector to develop hydraulic system for future devices.

---

**Electrical and electronics**
- Good Earth Electrical, Bristol
- Hellermann Tyton, Devon
- Scanstrut, Devon
- Switchgear Services Ltd, Devon
- Tamura-Europe, Wiltshire
- TDK Lambda, Devon
- Tecker Ltd, Cornwall

**Hydraulic specialists**
- Armada Marine Hydraulics Ltd, Falmouth
- Danser (SW) Ltd, Cornwall
- Duchy Hose and Hydraulics Ltd, Falmouth
- Hercules Hydraulics Ltd, Devon
- Hydraulic Projects Ltd, Devon
- Kawasaki Precision Machinery (UK) Ltd, Devon
- Hyphose, Poole

**Monitoring, measurement, and communications**
- Active Research, Dorset
- AGI, Dorset
- Aish Technology Dorset
- Biral, North Somerset
- Blacknor Technology, Dorset
- C-Max Ltd, Dorset
- Dantec Dynamics Ltd, Bristol
- D&G O’Brien UK Ltd, Somerset
- Flann Microwave Instruments, Cornwall
- KineticaRT, Devon
- Marine Electronic Services Ltd, Dorset
- Mecacon Controls Ltd, Gloucestershire
- Merlin Equipment, Dorset
- Microcomms Marine Ltd, Cornwall
- RFL Communications Plc, Wiltshire
- Scana UK Ltd, Bristol
- SEA (Group Ltd), Somerset
- Selex Communications Ltd, Bristol
- Software Radio Technology, Bath
- Triskel Marine, Cornwall
- Ultra Electronics Ocean Systems, Gloucestershire
- Valeport Ltd, Devon
- Westward Instruments Ltd, Cornwall

**Equipment Suppliers**
- A.P Valves, Cornwall
- Able Lifting, Dorset
- Apex Fluid Engineering Ltd, Bristol
- Atlantas Marine Ltd, Somerset
- Atlantas Marine Power Ltd, Devon
- CSIP Ltd, Dorset
- Golden Arrow Marine, Dorset
- Grimsey Marine Technology, Devon
- Grosvenor Pumps Ltd, Cornwall
- Hippo Marine Ltd, Cornwall
- Index Marine Equipment, Dorset
- Interlube Systems Ltd, Devon
- Matrix Marine Services, Devon
- Navionics UK, Devon
- Nomenca, Devon
- Northavon Pumps and Control, Bristol
- Oceaneering International, Gloucester
- Pump International, Cornwall
- Pump Supplies Ltd, Cornwall
- Reflex Marine Ltd, Cornwall
- RHC Lifting Ltd, Bristol
- Seawinch, Dorset
- Spencer Carter Ltd, Cornwall
- Subsea Asset Location Technology Ltd, Dorset
- Vector Developments, Dorset

**Device / Turbine Component Suppliers**
- B & C Reconditioning Gears Ltd, Wiltshire
- Beldam Burgmann, Cornwall
- Bighead Bonding Fasteners, Dorset
- Borg Transmissions, Dorset
- Centrax Ltd, Devon
- DP Engineering, Cornwall
- Fine Tubes, Devon
- Fluid Equipment International Ltd, Dorset

**Docking and Pontoons**
- Docking Solutions Ltd, Devon
- Jetfloat UK, Dorset
- Marine Designs Ltd, Cornwall
- Pontoon Works, Dorset
- Versadock UK, Cornwall

**Raw Materials**
- ABS Metals
- Imerys Minerals, Cornwall

**Tooling**
- GMB Eurotool, Devon
SEA BASED SUPPORT

South West England has a long seafaring history and as well as providing home ports for the Royal Navy, it was also the embarkation point for the earliest transatlantic cables. The region therefore has an abundance of offshore and subsea expertise, and this is reflected in the large number of companies working in this area.

Bristol, Portland and Plymouth have also become recognised as centres of excellence for marine operations, vessel charter, marine engineering, diving support services and sub-sea surveys.

Falmouth has become a hub for marine renewable operations with leading companies such as Fugro Seacore, Mojo Maritime, Insight Marine, LDD and Falmouth Divers. Mojo Maritime has worked on the deployment of a number of wave and tidal devices including the Seagen turbine for Marine Current Turbines at Strangford Lough and the Ocean Power Technologies ‘Power Buoy’ at Santona off the coast of northern Spain.

Keynvor Morlift, with bases in Cornwall and Devon, is another example of a company that have established a well earned reputation for their expertise and ability to install marine energy technology in the harshest marine environments.

Marine operations and management
- Keynvor Morlift Ltd, Devon
- Mojo Maritime, Cornwall
- Offshore Marine Management Ltd, Bristol
- Quest Underwater Services Ltd, Dorset
- Svitzer Marine Ltd, Bristol
- UMC International, Devon

Vessels, workboats and barges
- ADPS Ltd, Devon
- Bay Marine, Falmouth
- Challenger Marine, Falmouth
- Carlin Boat Charters, Dorset
- Eccocats, Ltd, Cornwall
- FD Marine Ltd, Falmouth
- Howard Marine, Devon
- JB Marine Services, Cornwall
- Jenkins Marine, Dorset
- Lyme Boats Ltd, Exeter
- Offshore Marine Management Ltd, Bristol
- Offshore Marine Solutions Ltd, Cornwall
- Offshore Marine Support, Gloucestershire

Drilling and piling
- Fugro Seacore Ltd, Falmouth
- Large Diameter Drilling Ltd, Falmouth
- Vecto Gray, Bristol

Sub-sea operations
- Dive Technologies, Portland
- Grimsby Marine Technology, Devon
- Insight Marine Projects Ltd, Cornwall
- Oceanecering International, Devon
- Pelagian Ltd, Wiltshire
- Quest Underwater Services Ltd, Dorset

Logistics
- Bax Global UK Ltd, Bristol
- Bond Air Services, Gloucestershire
- Osprey Shipping Ltd, Bristol
- Penzance Scuba, Cornwall
- Shotline Charters, Dorset
- Wind Wave Workboats, Ltd Cornwall

Mooring and navigation buoys
- Longitude engineers, Devon
- Lumen Seemarks, Cornwall
- Norfloat International Ltd, Devon
- Seawise Services, Cornwall

Diving and ROV services
- Alpha Marine Services Ltd, Plymouth
- Falmouth Divers Ltd, Cornwall
- Offshore Marine Support Ltd, Gloucestershire
- Specialised Technologies, Dorset

Offshore Surveys
- Aquatronics Ltd, Devon
- Coastal Research, Devon
- Coastal Science Ltd, Devon
- Coastline Surveys Ltd, Cornwall
- Ecospan Environmental, Plymouth
- Fathoms Ltd, Somerset
- Insight Marine Projects Ltd, Cornwall
- Marine Ecological Surveys Ltd, Plymouth

Safety equipment and access
- Latchways plc, Wiltshire
- Assetco Technical Rescue, Cornwall
- Reflex Marine, Cornwall

Other Marine
- Anchor Marine Plastics Ltd, Cornwall
- Challenger Marine, Cornwall
- Falmouth Oil Services Ltd, Cornwall
- Hielaman, Dorset
- Knight Search & Recovery Services, Cornwall
- Mecal Ltd, Devon
- PC Maritime, Devon
- R. Pearce & Co, Cornwall
- Sealander Marine International Ltd, Plymouth

For information on companies go to www.regensw.co.uk/directory
The south west is fortunate in having more than 70 ports with ready – access to deep water. Many of these are comparatively small, but there are a significant number of mid-sized commercial ports and a number of major international ports.

**BRISTOL**
As well as being a centre for advanced engineering and aerospace, Bristol has one of the world’s most technically advanced ports. Possessing a deep-water channel, the port is a gateway container port for the UK and a transhipment point for the Atlantic seaboard and Europe. With its excellent rail and road links, the port plans to expand its facilities with a new deep-sea container terminal in the Bristol Channel.

**FALMOUTH**
Falmouth is reputed to be the third largest natural harbour in the world. This deep water port is ideally located to access the wave–energy potential of the western approaches. It is also the home port for a number of companies engaged in offshore and subsea operations.

**PLYMOUTH**
Plymouth is a centre for naval engineering, much of which is centred around the Devonport Royal Dockyard.

Significant opportunities for industrial development are likely to arise as a result of the MoD rationalising its Devonport estate, with up to 80 hectares to be released in the near future. Plymouth provides an ideal location for marine–energy–related businesses, while the recently announced proposals to create a marine science and technology park in Plymouth will enhance its position as a leading location for developing the marine renewable energy sector.

**PORTLAND**
On the south coast, Portland is the UK’s newest commercial port but with more than one hundred years of history as a naval dockyard. The port lies within easy reach of Round 3 offshore–wind sites and the tidal resources off Portland Bill and the English Channel. Portland Port has plans in place to extend its quayside facilities to develop 130,000m² of additional dockside space with 700m of quayside. With the recent release of development land at the nearby Osprey Quay, Portland has significant potential for marine and offshore wind energy use.

**NORTHERN DEVON PORTS**
The construction and operational stage of the Atlantic Array will provide an opportunity for ports and harbours along the northern coast of Devon to act as bases during construction and operation. Ports and harbours such as Ilfracombe, Appledore and Yeliland could provide secondary construction and mobilisation facilities during the construction phase. This could include crew transfer, provisioning, cable laying support, survey, ROV/diving and standby vessels and other construction support activities.

**OTHER PORTS WITH POTENTIAL TO SUPPORT OFFSHORE WIND AND MARINE ENERGY DEPLOYMENT:**
- Dartmouth, Devon
- Fowey, Cornwall
- Hayle, Cornwall
- Par, Cornwall
- Padstow, Cornwall
- Penzance Dry Dock, Cornwall
- Poole, Dorset
- Portreath, Cornwall
- Teignmouth, Devon
- Truro, Cornwall
- Weymouth, Dorset

For information on companies go to www.regensw.co.uk/directory
The south west also has companies that can offer services that are vital to the organisation of offshore renewable projects. These companies provide the legal, financial and logistical expertise to secure and deliver a project.

Training Centres
- Kernow Training, Cornwall
- Maritime Training Plymouth, Devon
- Petroc College, Devon
- Offshore Marine Academy, Bristol
- Western Training Association, Plymouth

Financial
- Bishop Flemming, Bristol
- Ernst & Young, Exeter
- KPMG LLP, Bristol
- Smith & Williamson, Bristol
- Tridos Bank, Bristol

Legal
- Ashfords, Devon
- Bond Pearce LLP, Devon
- Clarke Wilmott LLP, Bristol
- Davies Johnson & Co, Devon
- Follett Stock, Cornwall
- Foot Anstey, Plymouth
- Lester Aldridge, Dorset
- Michelmores Solicitors, Devon
- Osborne Clarke, Bristol
- Pardoes Solicitors, Devon
- Stephens Scown, Cornwall
- Tozers LLP, Devon

For information on companies go to www.regensw.co.uk/directory
Regen SW is an independent, not for profit centre of expertise in sustainable energy.

Established in 2003, Regen SW continues to help transition the south west towards a low-carbon-based economy by supporting the deployment of renewable energy technologies and energy efficiency. We are an expert team working to enable business, local authorities and other organisations.

Regen SW is supporting the supply chain for offshore renewables through compiling a directory of companies, organising network events with key developers, manufacturers and service companies. Regen SW is also working with ports to identify new opportunities for development. Regen SW works closely with regional and national parties including the Crown Estate, DECC, Interregional Offshore Wind Group, the Marine Energy Industry Forum and RenewableUK.

For information on companies go to www.regensw.co.uk/directory

Our members play a central role in achieving our vision to lead the way in demonstrating how we can achieve a sustainable-energy future as the foundation of a prosperous low-carbon economy.

Membership is open to any organisation or sole trader that supports our mission. We invite you to join us. We are encouraging businesses, local authorities and other key partners to sign up to our new membership packages, sharing in the benefits of our services and recognising our work as an important investment in the future of sustainable energy.

Expert advice and market insight
- Monthly email bulletin
- Expert market insight online information at www.regensw.co.uk
- Access to Regen SW online community on Linked In

Enhanced profile
- Use of the ‘Member of Regen logo’ (subject to brand guidelines)
- First option to sponsor or exhibit at a Regen SW event
- An enhanced listing on the Regen SW Company directory http://www.regensw.co.uk/directory/
- Opportunity to submit a case study of your company/organisation for publication on www.regensw.co.uk

A strong voice
- Being a member of Regen SW entitles you to be part of Regen’s influencing role
- Invited to our AGM
- Opportunity to take part in Regen SW initiatives

Valuable cost concessions
- Member discount on all Regen SW events and discounts on partner events

Networking for success
- Access to Regen SW online community
- Member discount on all Regen SW events

For more information please visit our membership pages at: www.regensw.co.uk/information/login-join-us
Or contact our team at 01392 494399

“Regen SW has demonstrated total commitment to ensuring the south west maximises the potential of the sector”.

Richard Parkinson, Mojo Maritime.
The South West Marine Energy and Offshore Wind Company Directory is managed online by Regen SW.

The directory currently lists over 250 companies covering a broad range of products and services related to the marine and offshore wind energy sectors.

Addition to the directory is free, subject to the company having a base or regional operations in the South West of England.

For further details of the companies listed in this guide and for up-to-date information, visit the Regen SW's offshore renewables web pages at: www.regensw.co.uk/projects/offshore-renewables

If you are a business that would like to join the directory, or require help in sourcing products or services within the marine-energy supply chain, please contact:

Johnny Gowdy
Programme Director
Regen SW

email: jgowdy@regensw.co.uk
mobile: 01392 474323

This document has been printed on Revive Uncoated, 100% recycled from 80% de-inked post-consumer waste and 20% mill broke. All papers are elemental chlorine free.

Our thanks to the following companies for the use of imagery:
Front cover courtesy of Mojo Maritime
Marine Current Turbines
Airbus UK
A&P Falmouth
Eneco Wund UK
Falmouth Divers

Charlie Chambers www.charliechambers.co.uk
J&S Marine
Large Diameter Drilling
RWE npower renewables
Falmouth Harbour Commissioners
Dartmouth Wave Energy
PRIMaRE
Wave Hub
Portland Port
Bristol Port
Babcock Marine

For contact information go to
www.regensw.co.uk/directory

designed by dtwo creative ltd.