Large scale investment in renewable energy is crucial to secure our energy supply and to reduce our carbon emissions. It is also key to generate high skilled jobs in the UK’s growing low carbon economy. RWE is very pleased to support the work of Regen SW and other bodies, that are actively engaged to increase the number of UK companies working in the offshore wind and marine energy supply chain.

As this supply chain directory shows, the south west has a wealth of companies that have the capability and skills to make a significant contribution to the offshore energy sector. The south west business community has a great opportunity to generate commercial success and jobs within this new industry. From offshore operations, engineering and manufacturing through to consultancy and legal services.

At RWE we are committed to developing our portfolio of renewable energy projects including the Atlantic Array wind farm and to using UK and locally based companies within our supply chain. To meet this objective we are taking positive steps, including asking our tier contractors to explore how they can maximise local content and to report back to us on how much value is captured in the local economy.

We look forward to working with many of the companies in this directory, either directly or indirectly through our supply chain partners, and to supporting the growth of the offshore wind and marine energy sector in the south west.

Alastair Gill
Head of Offshore Development
RWE npower renewables
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INTRODUCTION

The massive investment in offshore renewable energy represents a tremendous economic opportunity for UK based businesses.

With core strengths in areas such as marine operations, engineering, engineering design and marine sciences - as well as specialist technical and renewable energy consultancies - companies based in the south west of England are already playing a key role in this exciting new industry.

Many of these companies have come into the sector from the existing marine, engineering, aerospace, manufacturing, composite and defence industries bringing with them the skills and capabilities that the offshore sector will require in order to deliver low cost green energy.

A key feature of the south west business community is the concentration of innovative companies that are actively engaged in collaborative partnerships with technology developers and who are willing to invest to provide innovative and cost effective solutions.
The strength of the supply chain, combined with the fantastic energy resources around the coast and excellent research facilities, has put the south west at the forefront of the marine energy sector.

In recognition of the investment that has been made to support technology development and the concentration of industry in the region, in January 2012 the south west was designated as the UK’s first Marine Energy Park.

This designation has enabled the south west to establish a very strong partnership with industry to promote the marine energy sector, attract investment and create a business environment to accelerate the commercialisation of marine energy technology.

**SUPPLY CHAIN DIRECTORY**

Now in it’s 6th edition, the Regen SW directory lists over 300 companies that are active in the offshore energy supply chain or have a high degree of potential to expand their business into the sector.

The directory and the accompanying online database (which can be found at [www.regensw.co.uk/directory](http://www.regensw.co.uk/directory)) is one part of the supply chain development activity that Regen SW has undertaken over the last 8 years.

For information on companies go to [www.regensw.co.uk/directory](http://www.regensw.co.uk/directory)
There are fantastic wave, wind and tidal energy resources at the heart of the south west’s offer for creating an offshore renewable energy industry.

The variety and expanse of these resources means that there is a broad portfolio of opportunities for both near term projects in offshore renewables development and potential for future projects using floating wind, enhanced tidal flow and tidal range technologies.

**WAVE ENERGY**

The south west peninsular is surrounded by the Atlantic, facing into the prevailing westerly oceanic swell. Waves here carry a great deal of energy - typically 15-25 kw/m off the North Cornish coast increasing to 35-40 kw/m in the area around the Isles of Scilly. While these waves are powerful, the south west benefits from less extreme storm conditions that would challenge ‘survivability’ of wave energy devices; which is an important element in early technology development.

**TIDAL ENERGY**

At 14 meters the Bristol Channel has the second highest tidal range in the world, with the potential to make a major contribution to the UK’s electricity needs from tidal lagoons, low head tidal bars, tidal fences and small barrages. This area also has significant tidal stream resources with flow speeds in excess of 2-2.5 m/s along the North Devon and Somerset coast. Other areas around the Isles of Scilly, Lands End and the English Channel off Portland Bill also have great potential.

The baseline scenario from the 2010 Offshore Renewable Resource Assessment and Development (ORRAD) report estimated there could be up to 9.2 GW of offshore wind and marine energy capacity installed off the south west by 2030. Of this, 1.24 GW could come from offshore wave energy projects and 1 GW from shallow and deep water tidal stream projects by 2030.

In addition, up to 4.4 GW of capacity from conventional offshore wind technology (in deeper water) and 2.5 GW through deeper water floating wind technology.

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

Two of the round three developments are based in the south west; these being the 1.5 GW Atlantic Array in the Bristol Channel developed by RWE npower renewables and the 0.9 GW Navitus Bay wind park off the Dorset coast being developed by Dutch utility Eneco Wind UK and EDF Energy.

Both projects are planned to be constructed in the second half of this decade and together will require a capital investment of over £7 billion. They are by far the largest renewable energy projects to have been commissioned in the south west.

There is significant potential for the expansion of offshore wind in the south west. The development of floating wind technology could provide a cost effective alternative to fixed foundations and would allow the deployment of wind turbines in deeper waters in the Bristol Channel and western approaches.

Utility companies and project developers

- Clean Energy Ltd, Somerset
- Ecotricity, Gloucestershire
- EDF Energy, Devon
- Eneco, Warwickshire
- Low Carbon Tidal, Gloucestershire
- Ocean Electric Power, Plymouth
- RWE npower renewables, Wiltshire

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

A number of world leading tidal energy device developers are based in the south west, such as Marine Current Turbines (MCT) and Tidal Generation Limited (TGL).

MCT have been trialling their 1.2 MW Seagen device at Strangford Lough, Northern Ireland since 2008. During this period it has generated over 5 GWh. MCT are now developing their Seagen S device and working towards two early commercial arrays in Kyle Rhea in Scotland and Anglesey in Wales.

TGL currently operate a 500 kW concept demonstrator unit at the European Marine Energy Centre (EMEC) site in Orkney, generating electricity since September 2010. In a project partnership with the Energy Technologies Institute (ETI), TGL are now developing their next generation 1 MW tidal stream turbine.

To support the development of the tidal energy sector the Bristol Tidal Energy Forum has been set up by Bristol City Council and Regen SW. This forum brings together tidal energy developers, suppliers and stakeholders to identify opportunities and address barriers to make use of resources in the Bristol Channel and Severn Estuary.

Tidal energy technology developers
• Aquascientific Ltd, Devon
• Marine Current Turbines, Bristol
• Pulse Tidal, Yorkshire /Devon
• SeaPower Gen, Hampshire
• Tidal Energy Ltd, Pembrokeshire
• Tidal Generation Ltd, Bristol
• VerdErg, Surrey /Cornwall

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

The south west’s strong wave climate, supply chain, test facilities and research capabilities provide all the elements that wave energy technology developers need to develop from concept to commercialisation.

As a result, many national and international wave energy developers have chosen to take advantage of the technology development pathway and establish a base in the region.

This includes 40South energy from Italy, who established a base in the Plymouth University Marine Building, and Irish wave energy developer Ocean Energy who have secured a berth at Wave Hub.

Wave energy technology developers

- 40South Energy, Italy/Plymouth
- Checkmate Seaenergy Ltd, Wiltshire
- Dartmouth Wave Energy Ltd, Devon
- Embley Energy, Bristol
- Fred Olsen Renewables, Norway/Cornwall
- Neptune Energy, Hampshire
- Ocean Energy Ltd, Ireland/Cornwall
- Ocean Power Technologies, USA/Cornwall
- Offshore Wave Energy Ltd, Bristol
- RCH Marine Renewables, Cornwall

For information on companies go to www.regensw.co.uk/directory
The University’s motto, ‘explore, dream, discover’ encapsulates a restless endeavour to push back the boundaries, to be pioneering in approach, using research and teaching to address issues and challenges at all levels of society – as relevant today as it was at the school’s founding in the Victorian era. The new Marine Building encapsulates that spirit – a £19 million investment that further enshrines the University, the City, and the South West as a centre of excellence for research, teaching, training and engagement with enterprise in the marine and maritime sectors. Boasting unmatched wave tank testing facilities, a navigation centre complete with state-of-the-art ship simulator and electronic chart technology, and a marine innovation centre for international businesses in the sector, the Marine Building is a portal into the academic community, through which industry can engage directly in research and development, knowledge transfer, and professional career advancement.

That academic community is housed within the University’s Marine Institute – a 400-strong body of scientists and specialists, spanning the broadest portfolio of expertise found anywhere in Europe. Inaugurated in 2006, the institute aims to address some of the grand challenges of the day: from ocean acidification and climate change, to renewable energy and coastal management.

The Marine Institute is a truly multidisciplinary organisation, and has a proud history of securing significant external grants from international funders, and developing innovative partnerships with educational institutions, industry and other maritime organisations. This legacy of world-leading, impactful research, of research-informed teaching and education success, was recognised in 2012 when the University, through the Marine Institute, was awarded The Queen’s Anniversary Prize for Higher and Further Education.

For further information please contact:

Adam Corney  
Marine Commercial Director

e: adam.corney@plymouth.ac.uk  
t: +44 (0) 1752 584994
One of the key features of the Marine Building is its hydrodynamics capabilities, which are unmatched anywhere in the UK and promise to be of global significance. The COAST laboratory combines wave, current and wind power to create a dynamic ‘theatre’ appropriate for device and array testing, environmental modelling and coastal engineering. Comprising:

Ocean Wave Basin
Coastal Basin
Sediment Wave Flume

www.plymouth.ac.uk/marinebuilding

The Marine Navigation Centre provides a range of facilities for training and research in the operation and management of offshore vessels. Several ‘Virtual’ ship’s bridges, as well as a ‘Full Mission’ system are equipped with all instruments found in the professional environment, including Radar, ARPA, AIS, GPS, ECDIS etc. The system has already been used to carry out research into safe navigation in the vicinity of wave energy converters by the creation of a model of the SW Wave Hub.
In the past eight years the south west has invested over £100m to establish itself as a centre for worldwide research and technology development.

The region's universities, Plymouth, Exeter, Bristol and Bath have strong capabilities in marine sciences, engineering and environmental sciences and have been at the vanguard of the development of the offshore renewable industry since the 1970’s.

In addition to these, there are a number of leading private sector research institutions to be found in the region, including the world renowned Plymouth Marine Laboratories (PML), the Marine Biological Association (MBA) and the UK Meteorological Office.

**Plymouth University**
- Marine Institute, Plymouth campus

**University of Exeter**
- Renewable energy team, Tremough campus
- Environmental Sustainability Institute

**University of Bristol**
- Department of mechanical engineering
- Department of aerospace engineering

**University of Bournemouth**
- Design simulation research centre

**University of West of England**
- Department of engineering design and mathematics

**University of Bath**
- Centre for power transmission and motion control
- Composites research unit

**Research and Innovation**
- The Marine Biological Association, Plymouth
- The Alister Hardy Foundation for Ocean Science, Plymouth
- Plymouth Marine Laboratories, Plymouth
- The UK Meteorological office, Devon
- The UK Hydrographic office, Somerset

For information on companies go to [www.regensw.co.uk/directory](http://www.regensw.co.uk/directory)
The Peninsula Research Institute for Marine Renewable Energy (PRIMaRE) is a collaborative partnership between Exeter and Plymouth Universities for research and technology transfer in marine renewable energy.

Academics from both universities contribute to research in six topic areas which include:

- resource characterisation
- environmental and biodiversity impacts
- marine renewable energy systems
- safe operations and navigational risk
- underwater and surface electrical systems
- socio-economic factors

In addition, PRIMaRE academics have been working closely with Wave Hub and have been involved with surveying the biodiversity at the site in order to create a base layer of data to understand the impacts of wave energy arrays.

PRIMaRE has access to a number of additional research facilities and equipment to support its research. These include the South West Mooring Test Facility, the Dynamic Marine Component Test Facility and the oceanographic research vessel Falcon Spirit.
Wave Hub is the largest, grid connected site for the testing and development of marine energy devices. This £42 million facility provides shared offshore infrastructure for the demonstration and testing of arrays of wave energy devices.

Located 16km off the North Cornish coast, Wave Hub is a 20 MW capacity electrical socket in the seabed to which arrays of wave energy devices can be connected. Wave Hub has four 5 MW berths and the excess capacity on the cable for up to 50 MW.

Two of the four berths on Wave Hub have now been reserved for wave energy developers and the potential for a demonstration facility for floating wind technology is being investigated.

Wave Hub is linked to the UK’s electricity grid via a purpose built substation next to the new Hayle marine renewables business park. The control and monitoring of devices at Wave Hub is performed remotely from the substation using data transmitted via fibre optic cables within the main subsea cable.
FABTEST

The Falmouth Bay Test site (FaBTest) is a one quarter scale, wave energy test site, developed in response to industry requests for an area to test part scale models of wave energy devices in dynamic environments.

Up to three devices can be deployed concurrently and whilst not grid connected, it provides a stepping stone from proof of concept to full scale deployment.

The Fred Olsen Bolt 2 Wave energy converter was the first device to be deployed at FaBTest in early 2012 with plans for more devices in the near future.

LYNMOUTH

The Lynmouth tidal energy demonstration site is off the north Devon coast at Foreland Point, with water depths of 18-20m and peak flow speeds of 2.5m/s, making it an ideal site for testing prototype devices, materials, components and technologies designed to exploit shallower and more moderate tidal flows. Pulse Tidal have signed an agreement to lease the Lynmouth site from The Crown Estate and are open to exploring opportunities for sharing the lease with an appropriate partner.

For information on companies go to www.regensw.co.uk/directory
There is a wide range of specialist technical and advisory consultancies in the south west offering services to support the offshore renewables industry.

This includes a number of world leading renewable energy consultancies such as GL Garrad-Hassan, IT Power, Zero Carbon Marine Ltd and Pure Energy Professionals. It also includes a full spectrum of environmental, oceanographic and multidisciplinary consultancies such as Parsons Brinckerhoff, Arup, Environ, the BMT Group, Coastline Surveys and Verco.

Multidisciplinary consultancies
- AECOM, Bristol
- Arup, Bristol
- Black and Veatch, Devon
- Buro Happold, Somerset
- Halcrow, Devon
- Hydrock, Plymouth
- Mott Macdonald, Bristol
- Parsons Brinckerhoff, Bristol
- Ramboll UK, Bristol
- Senergy, Somerset
- URS Scott Wilson, Bristol
- Worley Parsons, Bristol

Environmental consultancies
- APEM Ltd, Dorset
- Aquarius Marine Group, Somerset
- Coastal Research, Devon
- Cornwall Environmental Consultants, Cornwall
- ENVIRON, Devon
- Geoscience Ltd, Cornwall
- Marine Ecological Surveys Ltd, Somerset
- Royal Haskoning, Devon
- SLR Ecology and Environment Ltd, Devon
- Tamar Consultants, Plymouth
- Terence O’Rourke, Dorset
- Verco, Wiltshire
- WSP Environmental, Bristol

Naval architects and design consultancies
- Babcock International, Plymouth
- Beckingham Technology, Cornwall
- BMT Group, Somerset
- Frazer Nash Consultancy, Plymouth
- Houlder Ltd, Somerset
- Integer Solutions, Cornwall
- M2ED Ltd, Cornwall

For information on companies go to www.regensw.co.uk/directory
Bringing clarity at the intersection of science, business and policy

Quality, robust, defensible environmental support for renewables projects

Our services:
- Site appraisal
- Feasibility assessment
- SEA and EIA
- Planning and consenting
- Post consent support and monitoring
- Construction supervision

Our differences:
- Excellent understanding of issues
- Responsive and flexible approach
- Innovative approach to assessment
- Successful discussion with stakeholders
- Effective expression of results
- Technically and legally robust deliverables

30 years of consultancy experience, 89 offices worldwide
Contact Matt Davies 0131 225 9899 mdavies@environcorp.com

environcorp.com
CONSULTANCY SERVICES

Renewable energy consultancies
- BG Renewables, Cornwall
- BMT Group, Bath
- BVG Associates, Wiltshire
- GL Garrad Hassan, Bristol
- GoBe Consultants, Devon
- IT Power, Bristol
- Marine Energy Matters, Devon
- Mojo Maritime, Cornwall
- Pegasus Group, Bristol
- Project Management Support Services Ltd, Somerset
- Pure Energy Professionals, Devon
- Reygar Ltd, Gloucestershire
- Seawind Ltd, Plymouth
- Wardell Armstrong, Cornwall
- Wind Prospect, Bristol
- Zero Carbon Marine, Devon

Oceanographic and geotechnical consultancies and surveys
- APEM, Dorset
- Aquatonics Ltd, Devon
- Blom, Somerset
- Coastal Science Ltd, Devon
- Coastline Surveys Ltd, Cornwall
- Fugro Seacore, Cornwall
- GEMS Group, Somerset
- Insight Marine Projects Ltd, Cornwall
- Longitude Consulting Engineers Ltd, Devon
- Pacific Geosciences Ltd, Somerset
- Partrac Consulting, Plymouth
- Quantum Geotechnical Ltd, Devon
- South West Surveys Ltd, Devon
- Swathe Services, Cornwall
- Wind support ltd, Somerset

GoBe Consultants Ltd is a marine planning and environmental consultancy, based in the South West. We provide high quality strategic and project specific planning & environmental advice to the offshore development industries.

For details of our work or to discuss your project contact us on +44 (0)1626 323890 or email info@gobeconsultants.com

www.gobeconsultants.com
Pegasus Group

Pegasus Group are independent planning and environmental consultants with considerable experience in the renewable energy industry, onshore and offshore.

Pegasus are a focussed team of professionals committed to securing success for our clients. Core areas of expertise include:

- Environmental Impact Assessment (EIA) co-ordination and management
- Seascape, Landscape and Visual Impact Assessment
- Planning feasibility appraisals
- Planning application submissions
- Environmental Statement (ES) auditing
- Landscape/Planning Expert witness services at planning appeals

Offshore Wind Experience:

- Seascape Character Assessment (SCA)
- Seascape, Landscape & Visual Impact Assessment (SLVIA)
- Design optimisation studies
- EIA coordination
- Community & stakeholder consultation
- Visualisations including Zone of Theoretical Visibility (ZTV) plans, wireframes and photomontages

Current & Past Offshore Project Experience:

- Dudgeon Offshore Windfarm
- Blyth Harbour Windfarm
- Phase 1 of Firth of Forth Offshore Windfarm (Round 3 Zone 2)

Contact:
Andrew Cook [Environmental Director] - 07795 010 660 | andrew.cook@pegasuspg.co.uk
Rohan Sinha [Senior Landscape Architect] - 01285 885 599 | rohan.sinha@pegasuspg.co.uk
The south west is home to a large amount of companies working in the marine, aerospace, automotive and defence engineering sectors.

There are significant clusters of these companies based around the centres of advanced manufacturing that have been established in Bristol and Plymouth.

This includes companies such as the multinational Babcock International, who employ over twenty five thousand people globally, and the ship repairers A&P Falmouth which are part of the A&P Group.

**Marine engineers**
- **A&P Falmouth, Cornwall**
- Avonmouth Ship Repairers, Bristol
- Babcock International, Plymouth/Appledore
- Hamworthy Plc, Dorset
- LICEnergy UK Ltd, Bristol
- Manor Marine, Dorset
- Ocean Fabrication, Cornwall
- Penzance Drydock, Cornwall
- Princess Yachts International, Plymouth
- Rolls Royce Plc, Bristol
- Sub Marine Services Ltd, Cornwall
- Teignbridge Propellers, Devon

**Civil and construction engineers**
- Balfour Beatty Plc, Bristol
- BAM, Bristol
- CA Blackwell, Gloucestershire
- Cormac Solutions Ltd, Cornwall
- Davis Langdon, Bristol
- Dawnus Construction, Devon
- Dean and Dyball Civil Engineering, Devon
- Ryearch Ltd, Plymouth
- Sir Robert McAlpine, Bristol

For information on companies go to [www.regensw.co.uk/directory](http://www.regensw.co.uk/directory)
Supacat is an innovative engineering and design house that has a pedigree of developing and supporting high-mobility, all-terrain vehicles. We thrive on addressing complex engineering challenges by rapidly designing and developing specialist equipment for hostile environments.
Medium sized companies are also diversifying into offshore renewables, such as design engineers, Supacat who were involved with the Fred Olsen Bolt 2 now deployed at FabTest, Danish company LICEnergy UK Ltd and Armada Hydraulics, who are bringing skills from the marine hydraulics industry across into offshore renewables.

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

**Electrical engineers**
- ABB, Bristol
- Beran Instruments, Devon
- E-tech Group, Plymouth
- J+S Marine, Devon
- Power Protection and Control, Cornwall
- Powermann Ltd, Dorset
- Powersytems UK Ltd, Bristol
- Schneider Electric Ltd, Somerset
- **Stirling Dynamics, Bristol**
- Switchgear Services Ltd, Devon

**Consulting engineers**
- Atkins, Bristol
- Frazer Nash Consultancy, Plymouth
- Hoare Lea, Bristol
- Houlder Ltd, Bristol
- Hyder Consulting, Bristol
- **LICEnergy UK Ltd, Bristol**
- Longitude Consulting Engineers, Devon
- National Oilwell Varco, Dorset
- Pell Frischmann, Devon
- **Supacat Ltd, Devon**
25 years practical experience in technical hydraulic engineering, designing and building reliable, efficient and innovative hydraulics for power take off and control systems. Test rigs, power packs, hydraulic modules, frames, part supply, wallback pipework, commissioning, pressure testing and flushing.

- ISO Design & build
- Installations
- Manufacturing facilities
- Through life maintenance

- Innovative filtration systems
- Non-welded pipework systems
- Global support

Armada Marine Hydraulics, Unit 3, Bickland Industrial Park, Falmouth, Cornwall, United Kingdom, TR11 4TA
T: +44 (0)1326 375566 | E:sales@armadamh.co.uk | www.armadamh.co.uk

Mechanical engineers
- DP Engineering, Cornwall
- Kawasaki Precision Machinery (UK) Ltd, Plymouth
- LICEnergy UK Ltd, Bristol
- Redhall Engineering, Bristol

Specialist engineers
- Armada Marine Hydraulics, Cornwall
- PEG Precision Engineering, Plymouth
- Pressure Control Engineering Ltd, Dorset
- Strainstall UK Ltd, Somerset
- Supacat Ltd, Devon
- Thales Underwater Systems Ltd, Somerset
- Triskel Marine Ltd, Cornwall

For information on companies go to www.regensw.co.uk/directory
There is a long history of ship building, ship repair and manufacturing for the marine industries in the south west, including large scale fabrication in steel and concrete as well as plastics and composites.

It also includes manufacturing components such as hydraulics and pumps, electrical equipment, cables and communication systems; all of which continue to be essential in the offshore renewables industry.

### Manufacturing and fabrication
- **A&P Falmouth, Cornwall**
- Anchor Marine Plastics, Cornwall
- Babcock International, Plymouth/Appledore
- Bassett Engineering Ltd, Cornwall
- Blackhill Engineering, Devon
- BOC, Bristol
- Link Fabrication and Machining, Dorset
- Lowley Engineering Ltd, Cornwall
- Manuplas Ltd, Plymouth
- Manuflex Engineering Ltd, Somerset
- Morris Engineering Ltd, Plymouth
- Pendennis Shipyard, Cornwall
- REIDsteel, Dorset
- **Supacat Ltd, Devon**
- Taunton Fabrications, Somerset
- Underhill Engineering, Plymouth
- Universal Engineering, Dorset

### Electrical and electronics
- **ABB, Bristol**
- Compact Power, Bristol
- Index Marine, Dorset
- J+S Marine, Devon
- ML Electronics Ltd, Wiltshire
- Scanstrut, Devon
- **Stirling Dynamics, Bristol**
- Tamura-Europe Ltd, Wiltshire
- **TDK Lambda, Devon**
- Tecker Ltd, Cornwall

### Hydraulics
- **Armada Marine Hydraulics, Cornwall**
- Danser Hydraulics, Cornwall
- Duchy Hydraulics, Cornwall
- Hercules Hydraulics, Devon
- Hydraulic Projects Ltd, Devon
- Willis Ridley, Cornwall

For information on companies go to [www.regensw.co.uk/directory](http://www.regensw.co.uk/directory)
Measurement, communications and instrumentation

Active Research, Dorset
AGI, Dorset
Blacknor Technology, Dorset
Dantec Dynamics, Bristol
KineticaRT, Devon
Marine Electronic Services Ltd, Bristol
Matrix Marine Services, Devon
Megacon Controls, Gloucestershire
Merlin Power Systems, Dorset
RFL Communications Ltd, Wiltshire
Selex Elsag, Bristol
Strainstall UK Ltd, Somerset
Westward Instruments Ltd, Cornwall

Original equipment manufacturers and components

B&C Reconditioning (gears) Ltd, Wiltshire
Centrax Ltd, Devon
Finetubes, Plymouth
Grimsey Marine Technology, Devon
Interlube Systems Ltd, Plymouth
Rolls Royce Plc, Bristol
Safi Ltd, Dorset
Tides Marine International, Dorset
Whiddon Valley Engineering, Devon
Vestas Spare Parts Ltd, Bristol

Generators

Brammer Ltd, Cornwall
Borg Transmissions, Dorset
Paravalux Electric Motors, Dorset

Bearings

H4 Marine Ltd, Plymouth
Phoenix Bearings, Gloucestershire

Cables

Hellerman Tyton, Plymouth
Global Marine Systems, Dorset
Pelagian Submarine Cable Specialists, Wiltshire
Teledyne DG O’Brien, Bristol

Seals

Ram Gasket Solutions, Cornwall
Superior (Seals), Dorset

Fasteners

Seaware, Cornwall
BigHead (Bonding and Fasteners), Dorset
Anixter Component Solutions, Dorset
TR Fastenings Ltd, Cornwall

Pumps

Fluid Equipment International Ltd, Dorset
Grosvenor Pumps, Cornwall
Pump Supplies Ltd, Cornwall
Maricuda, Hampshire
Northavon Pumps and Control, Bristol
Watson Marlow Pumps Group, Cornwall

For information on companies go to www.regensw.co.uk/directory
There are a number of world leading composite design and manufacturing companies based in the region.

This includes major aerospace companies such as Rolls Royce, GE Aviation, Airbus and GKN who are investing heavily in facilities and manufacturing capabilities across the south west.

Other regional businesses are playing a leading role, such as Pipex PX, a Plymouth based company who work extensively in offshore renewables, and Norco GRP in Dorset who worked for Atlantis Resources Corporation in manufacturing replacement blades for their tidal stream demonstration device.

Composite design and manufacture
- Anglo Krempel, Devon
- Babcock Composite Technology Group, Bristol
- Brecknell Willis Composites, Somerset
- Composite Integration Ltd, Cornwall
- DIAB Group Ltd, Gloucestershire
- Independent Composites Ltd, Bristol
- Magnum Venus Plastech, Cornwall
- Manuplas Ltd, Devon
- MCMC Ltd, Bristol
- Movevirgo Ltd, Cornwall
- Multimarine Composites, Cornwall
- Norco GRP Ltd, Dorset
- Pipex PX, Devon
- South West Composites Gateway Project, Bristol
- Tods, Somerset
- Umeco distribution, Bristol

Aerospace companies
- Airbus UK, Bristol
- Augusta Westland, Somerset
- Axsym Engineering, Bristol
- BAE Systems, Bristol
- GE Aviation, Bristol
- GKN Aerospace, Bristol
- Rolls Royce Plc, Bristol

For information on companies go to www.regensw.co.uk/directory
The National Composites Centre (NCC) is the UK’s centre of excellence in composites and advanced materials applied research.

The NCC opened in 2011 and is based at the Bristol and Bath science park. The 8,500 m² centre provides manufacturing facilities for composites at an industrial scale and aims to be a hub for the UK’s manufacturing industry.

The NCC provides an independent open access facility that supports design innovation leading to rapid manufacturing and commercial exploitation of advanced composite materials for the aerospace, marine, automotive and renewable energy industries.

The NCC is supported by a range of industrial partners including Vestas, Airbus, Augusta Westland, Rolls Royce, and GKN as well as regional universities:

University of Bath
- Composites Research Unit, Department of Mechanical engineering

University of Bristol
- Department of Aerospace engineering

Plymouth University
- Advanced Composites Manufacturing Centre

University of West of England
- Aerospace Manufacturing
- Bristol Institute of Technology
- Advanced Composites Centre for Science and Innovation (ACCIS), Bristol

www.nccuk.com

www.pipexpx.com

For information on companies go to www.regensw.co.uk/directory
South west based marine operations and subsea support companies have a well established reputation for their ability to install, operate and maintain offshore renewable energy devices and infrastructure in the most difficult environments.

Falmouth has become a hub for leading companies in this sector such as Mojo Maritime, Fugro Seacore, Keynvor Morlift and Falmouth Divers. Mojo Maritime have worked on the deployment of a number of wave and tidal energy devices including the Seagen turbine for Marine Current Turbines at Strangford Lough and the Ocean Power Technologies Power Buoy at Santona, Spain.

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

For information on companies go to www.regensw.co.uk/directory
Vessels, workboats and work barges

- **ADPS Ltd, Plymouth**
- Bay Marine, Cornwall
- Carlin Boat Charters, Dorset
- Ecocats Ltd, Cornwall
- FD Marine Ltd, Cornwall
- Howard Marine, Plymouth
- JB Marine Services, Cornwall
- Jenkins Marine, Dorset
- **Keynvor Morlift Ltd, Cornwall**
- Lymeboats/Southboats Ltd, Isle of Wight
- Marine and Towage Services Ltd, Cornwall
- Offshore Marine Solutions, Cornwall
- Offshore Marine Support, Gloucestershire
- Osprey Shipping, Bristol
- Wind and Wave Workboats Cornwall

Marine warranty services and inspections

- DNV, Dorset
- **Germanischer Lloyd, Somerset**
- R Pearce and co, Falmouth
- Suretest Marine Ltd, Dorset

Craneage

- RHC Lifting Ltd, Bristol
- Seawinch, Dorset
- South West Crane Hire, Devon
- Sparrow Crane Hire, Bristol

For information on companies go to [www.regensw.co.uk/directory](http://www.regensw.co.uk/directory)
PORTS, PORT OPERATIONS AND LAND BASED SUPPORT

There are more than 70 ports in the south west that can support the technology development, manufacture, installation, operations and maintenance of offshore renewable energy projects.

A key advantage for the South West is the close proximity between the ports, areas of high energy resource and centres of research and industry.

A significant number of these are medium sized commercial ports and a number are major international ports.

**PORTLAND**

Portland is one of the UK’s newest commercial ports and has over 100 years experience as a naval dockyard. Now a part of Langham Industries the port lies within easy reach of the planned Navitus Bay Wind Park and the tidal resources around Portland Bill and the English Channel.

**FALMOUTH**

With the deepest natural harbour in Western Europe and a well established marine supply chain, Falmouth is well positioned to continue as a leading port for offshore renewables. The FabTest in Falmouth bay is well serviced by Falmouth port including quayside facilities, marine operations companies, repair and maintenance and workshop facilities.

**PLYMOUTH**

Plymouth is a centre for naval engineering much of which is centred around the Devonport Royal Dockyard – the largest naval base and dockyard in western Europe. It directly employs over 5000 people with 14 drydock’s and 25 tidal berths on a 263ha site. The Ministry of Defence is in the process of releasing up to 10 sites on the base for private development including 32ha at south yard.

**NORTH DEVON PORTS**

The construction and operation phases of the Atlantic Array wind farm and the Lynmouth tidal demonstration site will provide an opportunity for the ports and harbours along the Northern coast of Devon. This includes ports such as Ilfracombe, Appledore and Yelland who could provide secondary mobilisation and facilities during the construction and operation phases.

For information on companies go to [www.regensw.co.uk/directory](http://www.regensw.co.uk/directory)
HAYLE

Hayle harbour on the North Cornish coast is approximately 20km from Wave Hub and ideally placed to service the operation and maintenance needs of its customers. Although access is constrained through a tidal channel, it is undergoing a major £20 million redevelopment of its port infrastructure including access, quayside space and a 0.8ha marine renewables business park.

BRISTOL

As well as being a centre for advanced engineering, composites and aerospace, Bristol is one of the most advanced ports in the world. It is a gateway container port for the UK and a major transhipment point for the Atlantic seaboard. With its excellent rail and road links, the port also plans to expand its facilities with a new deep-sea container terminal in the Bristol Channel.

Other ports with potential to support offshore wind and marine energy development
- Brixham, Devon
- Dartmouth, Devon
- Fowey, Cornwall
- Par, Cornwall
- Padstow, Cornwall
- Penzance, Cornwall
- Poole, Dorset
- Teignmouth, Devon
- Torquay, Devon
- Truro, Cornwall
- Weymouth, Dorset

For information on companies go to www.regensw.co.uk/directory
As well as world class universities, the region has a large range of establishments to train and up-skill the next generation of engineers and technicians for work in the sector.

This includes specialist courses and qualifications in marine engineering, fabrication, safety and survival at sea and general maritime skills training.

Further education colleges
• **Bicton EARTH centre, Devon**
• Bournemouth & Poole College, Dorset
• Bristol City College, Bristol
• City College Plymouth, Plymouth
• Cornwall College, Cornwall
• Falmouth Marine School, Cornwall
• Petroc College, Devon
• **South Devon College, Devon**
• Truro College, Cornwall
• Weymouth College, Dorset
• University Technical College, Plymouth

Training centres and providers
• Aquos Ltd, Cornwall
• Kernow Training, Cornwall
• Maritime Training, Plymouth
• Ocean Training Plymouth, Plymouth
• Offshore Marine Academy, Bristol
• Seaways Consultants, Bristol
• Western Training Association, Plymouth

For information on companies go to [www.regensw.co.uk/directory](http://www.regensw.co.uk/directory)
Exeter University’s Renewable Energy group has a proven record of collaboration with industry. Our researchers offer expertise in offshore reliability, resource assessment, marine policy, hydrodynamics and marine operations.

We’ve engaged with device developers since 2005 and developed equipment and facilities such as the South West Mooring Test Facility (SWMTF) and the Dynamic Marine Component test facility (DMaC). Exeter University is a founding partner in the Falmouth Bay Test site (FaBSTest) and the South West Marine Energy Park.

www.exeter.ac.uk/business

For information on companies go to www.regensw.co.uk/directory
As the renewable energy sector has grown and become part of the mainstream economy, many financial service companies, insurance companies, banks and law firms have set up renewable energy teams to provide specialist support for projects and finance.

This ranges from law firms, such as Burges Salmon and Osborne Clarke, to public relations specialists Inspirations, financial services companies KPMG and Ernst and Young, and industry representative bodies such as the International Jack Up Barge Owners Association in Plymouth.

<table>
<thead>
<tr>
<th>Financial</th>
<th>Health and safety</th>
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<tr>
<td>Bishop Fleming, Bristol</td>
<td>Assetco Technical Rescue, Cornwall</td>
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<td>Inspirations, Devon</td>
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<td>Atlas Services Group Ltd, Cornwall</td>
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<td>Burges Salmon, Bristol</td>
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<td>Grant Thornton LLP, Bristol</td>
<td>Cetus Innovate Ltd, Somerset</td>
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<td>Osborne Clarke, Bristol</td>
<td>Climate Change Matters, Devon</td>
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<tr>
<td>Stephen Scown Solicitors, Devon</td>
<td>Jonathan Packer and Associates, Somerset</td>
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<tr>
<td>TLT LLP, Bristol</td>
<td>Roger Tym and Partners, Devon</td>
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For information on companies go to [www.regensw.co.uk/directory](http://www.regensw.co.uk/directory)
In a rapidly changing sector, you need legal advice that is sharp and up to speed, delivered by lawyers with understanding and expertise.

- we’re specialists with over 20 years’ experience in renewable energy and clean technologies
- we act for key players of all sizes, from regional community projects to international consortia

To find out how we can help power your renewables business, call our team on +44 117 917 3000

burges-salmon.com/renewables

“Burges Salmon has real expertise in the industry and the other advantage is strength in depth.”

Chambers UK

Burges Salmon is one of only a few legal teams in the UK with experience of advising on offshore renewable energy projects (including offshore wind, wave and tidal) throughout their development cycle from site assembly and consenting through finance, construction and operation.

We act for developers, investors, funders, offtakers and the supply chain. If you need advice or want to know more about our experience contact;

Ross Fairley, Head of Renewables
+44 (0) 117 902 6351

www.burges-salmon.com

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

<table>
<thead>
<tr>
<th>Organisation</th>
<th>Website</th>
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<tr>
<td>RenewableUK</td>
<td><a href="http://www.bwea.com">www.bwea.com</a></td>
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<tr>
<td>British Marine Federation</td>
<td>wwwbritishmarine.co.uk</td>
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<tr>
<td>The Crown Estate</td>
<td><a href="http://www.thecrownestate.co.uk">www.thecrownestate.co.uk</a></td>
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<tr>
<td>Invest in Bristol</td>
<td><a href="http://www.investinbristol.com">www.investinbristol.com</a></td>
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<td>The Marine Management Organisation</td>
<td><a href="http://www.marinemanagement.org.uk">www.marinemanagement.org.uk</a></td>
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<td>GAIN</td>
<td><a href="http://www.gaininbusiness.com/index">www.gaininbusiness.com/index</a></td>
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<td>PRImaRE</td>
<td><a href="http://www.primare.org">www.primare.org</a></td>
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<td>Environmental inet</td>
<td><a href="http://www.environmental-">www.environmental-</a> inet.co.uk</td>
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<td>Bristol Tidal Energy</td>
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<td>Invest in Cornwall</td>
<td><a href="http://www.investincornwall.com">www.investincornwall.com</a></td>
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<td>Cornwall Marine Network</td>
<td><a href="http://www.cornwallmarine.co.uk">www.cornwallmarine.co.uk</a></td>
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<td>Offshore Wind England</td>
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<td>MOR Group</td>
<td><a href="http://www.moreewables.co.uk">www.moreewables.co.uk</a></td>
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<tr>
<td>The Manufacturers Organisation</td>
<td><a href="http://www.eef.org.uk">www.eef.org.uk</a></td>
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For information on companies go to [www.regensw.co.uk/directory](http://www.regensw.co.uk/directory)
The south west of England was designated as the UK’s first Marine Energy Park in January 2012, and covers the geographic area from the Severn Estuary, Bristol Channel and around the coast of Cornwall to the Isle of Wight. The designation recognises the fantastic energy resources that the south west has, as well as the clusters of research, industry and supply chain around the hub areas of Bristol, Plymouth and Cornwall.

The aim of the South West MEP is to create a business environment that will accelerate the commercial development of the marine energy sector. To do this the South West MEP has established a powerful partnership which now consists of over 80 organisations from the private sector, research organisations, universities and public bodies.

This partnership, led by the South West MEP Steering Board, is now able to provide a strong voice for the industry and is working with government, planning authorities, local and national bodies to promote the industry, remove barriers and risks and attract investment.

If you or your company want to learn more about the South West MEP or join the partnership please contact Johnny Gowdy jgowdy@regensw.co.uk

More information about the South West MEP can be found in its prospectus, available online at www.regensw.co.uk/projects/offshore-renewables/marine-energy-/marine-energy-parks
Regen SW is an independent, not for profit centre, centre of expertise in sustainable energy. Its mission is to enable business, local authorities, communities and other organisations to deliver ground-breaking renewable energy and energy efficiency projects with thriving local supply chains.

Regen SW has over ten years experience working with industry, technology developers, universities and local authorities to support the deployment of sustainable energy technologies.

As well as supporting companies in the supply chain, Regen SW has been instrumental in the strategic development of the offshore renewable energy industry in the region including; developing the first concept for Wave Hub; working with offshore wind developers; development and programme management of the South West Marine Energy Park.

MEMBERSHIP SERVICES

Regen SW’s members play a central role in achieving our vision.

Membership is open to any organisation 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 membership packages, sharing in the benefits of our services and recognising our work as an important investment in the future of low-carbon energy.

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

For information on companies go to www.regensw.co.uk/directory
REGEN SW ADVISORY SERVICES

In addition to our core membership services, Regen SW has launched a new Advisory Service to provide both public and private sector organisations with an in-depth understanding of low-carbon technologies, policy and market opportunities. These bespoke services can be tailored to enable your organisation to capitalise on the growth of the sustainable energy sector, respond to policy changes and unlock market opportunities.

REGEN SW WORK WITH:
- Public Sector and local authorities
- High growth businesses
- Technology developers
- Project developers
- Research organisations
- Third sector organisations

ADVISORY SERVICES INCLUDE:
- Renewable energy strategy
- Resource & opportunity assessment
- Technology and market assessment
- In-depth policy insight
- Market entry & business development
- Economic development and investment
- Planning policy & stakeholder engagement

For more information about Regen SW Advisory Services and how we can work with you on a specific project or on a longer term partnership basis, please contact Johnny Gowdy or Lee Richards on +44 (0)1392 494 399
THE MARINE ENERGY AND OFFSHORE WIND SOUTH WEST COMPANY DIRECTORY IS MANAGED ONLINE BY REGEN SW.

The directory currently lists over 300 companies covering a broad range of products and services related to the marine and offshore wind energy sectors.

For further details of the companies listed in the guide, visit the Regen SW offshore renewables web pages at: www.regensw.co.uk/directory

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

Johnny Gowdy
Programme Director
Regen SW

Email: jgowdy@regensw.co.uk
Tel: +44 (0) 1392 494399

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