Building Offshore Wind in England

CORE: Centres for Offshore Renewable Engineering
46GW in operation, construction or development

- Liverpool City Region, P28
- Great Yarmouth & Lowestoft, P30
- Kent, P32

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Ministerial Foreword

Offshore wind is a UK success story – and it’s also an area with great potential.

We already have more offshore wind up and running than anyone else in the world – and this is just the beginning. The reasons why we support offshore wind are very clear: we’re an island nation, blessed with strong winds and shallow seas – the energy resource really is on our doorstep. We are determined to move to cleaner energy generation, and maintain a balanced energy mix that will provide us with security of supply, and offshore wind is central to our vision of a low carbon economy with an increasing share of renewable energy.

Offshore wind isn’t just about building wind farms: I want the UK to be a world leader in the offshore wind industry, and ensure that we capture the economic benefits of this new industry. Building a new supply chain isn’t something that can be driven single-handedly by Central Government: the commitment and expertise of our towns, our businesses, and our communities are essential to this project. And Centres for Offshore Renewable Engineering (CORE) will be instrumental in providing an integrated and co-operative approach between Government and local partners.

Rt Hon Edward Davey MP
Secretary of State for Energy and Climate Change

CORE brings together the relevant expertise from UK Central Government and the six major investment hubs in England to support business growth and showcase opportunities for foreign direct investment (FDI) for the offshore wind sector.

This joint working alliance between parties strengthens the complete England offer and highlights it as a connected, credible and exciting place to invest.
Britain delivers on time, on specification and on budget

The perfect location to expand your business

Businesses have several important criteria when assessing new countries to locate to or expand in. Choosing England as a location provides access to hundreds of years of world leading technology, research & development (R&D) and engineering excellence.

England already hosts many of the world's major companies due to its beneficial tax regime, labour laws, strong economy and government which supports business investment.

England is a logistics hub to the world with excellent connections by road, rail, air and sea. From our port sites you can gain easy access to the UK's offshore wind Rounds 1, 2 and 3 developments as well as the wider European market.

England has attracted key players in the offshore wind market and is looking to build its supply chain to service projects in UK and European waters.

This brochure provides details of the six Centres for Offshore Renewable Engineering (COREs) in England identified as having optimum conditions for the offshore wind industry with the land, infrastructure, skills and supply chain expertise required to take advantage of the world's largest engineering opportunity.
Benefit from a highly supportive business environment

Highly supportive business networks and associations such as the Carbon Trust, the Energy Technologies Institute, the Offshore Wind Developers Forum, and RenewableUK are available.

There are also many financial support mechanisms including the Regional Growth Fund and reduced corporation tax for R&D. The UK Government’s new Patent Box scheme means that from April 2013, businesses operating here will pay up to 56% less corporation tax on eligible profits arising from patents.

Enterprise Zones are specific areas where a combination of financial incentives, reduced planning restrictions and other support encourages the creation of new businesses.

England has a number of bespoke centres of excellence for offshore renewables such as the National Renewable Energy Centre (Narec), the Advanced Manufacturing Research Centre (AMRC), and The Deep in the Humber which is home to the University of Hull’s research facilities that simulate ocean conditions used to test offshore wind turbine foundation designs.

England has some of the world’s finest universities which, in 2010-2011 had approximately 160,900 students studying subjects relevant to offshore wind.

There is also an abundant skilled workforce and specialist training facilities for all business needs.

Links:
www.carbontrust.com
www.eti.co.uk
www.narec.co.uk
www.amrc.co.uk
www.thedepthumber.co.uk
www.RenewableUK.com

The Deep, Humber CORE
England offers the ideal location choice for offshore wind businesses

**Exploitation of the largest offshore wind market will require a significant expansion of the supply chain.**

- Environmental conditions mean that the areas off the coast of the UK offer the best wind resources in Europe with a theoretical potential “harvest” of 1,000TWh every year.

- The scale and size of the UK offshore wind market offers a range of revenue and supply side opportunities. The UK has 40% of EU wind capture capacity and the largest project portfolio in the world providing opportunities in design, build, maintenance and operation.

- More supply chain capacity will be needed to meet demand. Electricity produced by offshore wind has increased from 652GWh in 2006 to 3,044GWh (just over 3TWh) produced in 2010. This growth will continue and supply capacity is expected to increase from the current 2GW to 40GW by 2030.

**A strong and supported port infrastructure, an established skills base with favourable labour costs, centres of excellence, financial support and a network of industry bodies are available to an offshore wind company based in the UK.**

- The UK has the largest ports industry in Europe with several sites suitable for offshore wind manufacturing, construction and operations & maintenance (O&M).

- Many centres of excellence, a large talent pool and a substantial skilled workforce have been established around the country to support growth and greater collaboration.

- Government support is accessible through financial assistance and initiatives.
£110 billion of investment expected in UK waters by 2020
Opportunities exist to supply components to all levels of the supply chain. These include Tier 1 items such as turbines, blades, towers, gearboxes, generators, control systems, transformers, foundations and cables; and Tier 2 & 3 components such as machine parts, flanges, fixings, bearings, castings, forgings and rolled steel.

Opportunities also exist in components and tooling manufacture/supply as well as R&D of processes and materials.

The offshore wind industry is a major user of composites in blade manufacture and nacelle body panels.

Operations and Maintenance of the installed offshore wind farms will require substantial long term investment. There are opportunities to set up O&M bases in all of the port sites near UK wind farms.

Opportunities exist for consultants in areas of land agency, finance/economic, document management, engineering, legal, public relations, insurance, and Environment Impact Assessment. The opportunity is estimated to equal £204 million in 2010-2015.

Opportunities are available to firms to manufacture and supply foundations and substations and develop new and innovative structures.
Building Offshore Wind in England

England is open for business.

Growth areas of opportunity in England

England is open for business and looking for potential Joint Ventures, Inward Investment, Partnering Opportunities and developing new trade links.

It is anticipated that up to 7,000km of subsea export cable will be required for Round 3 zones before 2020.

In addition to multiple substations, converters, reactors and switchgear, a combination of AC, DC and HVDC (high voltage direct current) are expected to be required.

Locating your business in England will also enable you to conduct your business in GBP pounds Sterling (£). This will significantly de-risk your product or service to a potential buyer already based in the UK as it removes any chance of currency fluctuations.

The power from UK wind developments will be produced in £/MW, and as such there are many advantages in locating your business in England and providing your product or service in GBP.

- Operations and Maintenance (O&M)
- Construction/Assembly
- Turbine Components
- Composites
- Tooling
- Project Management
- Health and Safety
- Supply Chain Components
- Forgings and Castings
- Vessels for Installation, Access and Egress
- High Voltage Electrical Equipment
- Foundations
- Training
- Logistics
- Cables
- Consultancy Services
- New Products and Services

England is open for business.
CORE support for existing businesses

CORE brings together the relevant expertise from UK Central Government and the six major investment hubs in England to support business growth and showcase opportunities for foreign direct investment (FDI) for the offshore wind sector.

Although CORE acts as a mechanism for attracting FDI in offshore wind to England, equally important is its role as a mechanism to support existing businesses in England become more successful in the global market.

CORE aims to generate a process for strong two-way communication between the offshore wind supply chain and UK Government, providing support where necessary through the Local Enterprise Partnerships and Central Government departments.

This joint working on a national basis will also look to address problems faced nationally by industry, working together to remove barriers to improve growth and investment.

Benefits

- Tackling key business issues and barriers preventing growth and investment.
- Support for grant funding applications including the Regional Growth Fund (RGF) and Technology Strategy Board (TSB) programmes.
- Access to information on potential opportunities and future developments within the industry and assistance on how to benefit from these.
- Participation in events arranged at UK Trade & Investment (UKTI) foreign embassies to identify potential joint ventures or new international business opportunities, including support for increasing exports.
- Improved co-ordination between trade bodies, skills groups and membership organisations to ensure that companies are kept informed about initiatives, events and funding opportunities. Information will be delivered through updates from experts which will also include legal, financial and business updates on relevant issues.
- Assistance in becoming more competitive through national initiatives such as that which the Offshore Wind Programme Board (OWPB) is delivering and assistance on a local level with funding applications and finding suitable land/precincts.
- Assistance for Original Equipment Manufacturer (OEMs) and Tier 1 and 2 companies to source local suppliers and for Small to Medium Enterprise (SMEs) to become more competitive through help from bodies such as the Manufacturing Advisory Service (MAS).
Ambition that knows no boundaries

The Shard, London. At 310 metres is the second tallest building in Europe.

Completed in March 2012 with steel provided from Tees Valley company Cleveland Bridge UK. Eleven thousand glass panels lifted into place by Humber-based Peter Hird and Sons using spider cranes and “shell and core” decoration provided by Kent company S.Lucas.
Assistance for entering the UK supply chain

Businesses looking to locate in the UK receive an end-to-end assisted service which provides support throughout the process from initial enquiry to project completion.

This includes the provision of local and national information and support in identifying the best location for your business.

This service is free of charge and is provided by UK Trade and Investment. For more information contact www.ukti.gov.uk or your local Foreign Commonwealth Office.

For investments into CORE areas there is an extra level of support to provide information and assist with your decision making process. All services are free of charge and include:

- Free location finding service – including arranging site visits.
- Expert local advice in each area – knowledge of local suppliers, schools and housing.
- Support from the Local Enterprise Partnership (LEP) business investment team.
- Assistance with finding skills and training provision.
- Assistance from Local Government – such as planning applications.
- Assistance for applications for grant funding and support such as Regional Growth Fund, Advanced Manufacturing Supply Chain Initiative and the Technology Strategy Board.

Local contact details for each of the COREs are available on Pages 20-33 along with more detailed information on each area.
CORE will also be working in partnership with trade bodies within the offshore wind sector to give support to the valuable work they do with the business community.

Membership organisations can significantly help your business flourish through providing introductions to potential new clients and providing opportunities to promote your product or service at trade events. Many also lobby government and highlight issues faced by industry.

Services provided include:

- Business Networking
- Meet the Buyer events
- National and International Events Programmes
- Publicity, News and Magazines
- Introductions to clients
- Overseas visits and partnering

RenewableUK is the UK's leading renewable energy trade association. We develop and promote the wind and marine energy industries, protect members’ interests, facilitate business networking, and organise events.

Contact: membership@RenewableUK.com
Web: www.RenewableUK.com

EEEGR is a non-profit, business-led group committed to the sustained development of the energy sector in the East of England.

Contact: office@eeegr.com
Web: www.EEEGR.com

EEEGR is a non-profit, business-led group committed to the sustained development of the energy sector in the East of England.

Contact: office@eeegr.com
Web: www.EEEGR.com

Energi Coast is the representative group for the North East of England's offshore renewables sector; promoting the extensive offshore renewable energy sector expertise from the region.

Contact: energicoast@nofenergy.co.uk
Web: www.EnergiCoast.co.uk

A coalition of organisations working together to provide supply chain expertise to wind farm developers, turbine manufacturers, top tier suppliers and English based supply chain companies.

Contact: info@offshorewindengland.co.uk
Web: www.offshorewindengland.co.uk

NOF Energy is a highly proactive business development organisation working on behalf of companies within the oil, gas, nuclear and offshore renewables sectors.

Contact: plivingstone@nofenergy.co.uk
Web: www.nofenergy.co.uk

The Energy Industries Council (EIC) is the leading trade association providing dedicated services to help members understand, identify and pursue business opportunities worldwide.

Contact: info@the-eic.com
Web: www.The-EIC.com
Bridging you to the world

The Humber Bridge, an elegant piece of engineering which for 16 years, held the record for the world’s longest suspension bridge, Humber CORE.
Enterprise Zones benefit from:

- Business Rate relief per company up to a maximum of £275,000 over a five year period.
- Streamlined planning through the use of Local Development Orders.
- Government support to ensure that superfast broadband is rolled out throughout each Zone.
- Some Enterprise Zones also benefit from 100% first year Enhanced Capital Allowances of up to £100 million for plant and machinery.

Enterprise Zones can be in the form of available land for development and also existing offices and business units which are ready built for supply chain companies, with many targeted at the energy sector.

For full details on the Enterprise Zones in each of the England CORE areas please contact the local CORE representative.
World leading centres of excellence and R&D

100m Blade Test Facility, National Renewable Energy Centre.
### National Renewable Energy Centre

The National Renewable Energy Centre, (Narec), has invested over £150 million of UK Government, private sector and European Union funding to create a unique, integrated portfolio of industry accredited testing and research facilities for offshore renewables.

The Centre operates on an independent and open-access basis, leads collaborative European research and technology development programmes, and delivers commercial services for international clients, including: utility developers, OEMs, technology developers, electrical network equipment suppliers and investors.

Narec plays an important role in supporting delivery of the Government’s policy objectives and in attracting and anchoring internationally mobile investment in the UK. For more information see: www.narec.co.uk

Available facilities include:
- 100MW Capacity Blyth Offshore Wind Demonstration Site
- Offshore Anemometry Hub
- 15MW Capacity Wind Turbine Drive Train Test Facility
- 3MW Capacity Turbine Drive Train Test Facility
- 100M Wind Turbine Blade Test Facility
- 50M Wind Turbine Blade Test Facility
- Electrical and Materials Test Laboratory
- Wet and Dry Dock Test Facilities

### Offshore Renewable Energy Catapult

Catapult is a big push to revitalise our economy by stimulating innovation and accelerating growth for the UK. Catapults are a rapidly growing network of seven technology and innovation centres, established and overseen by the Technology Strategy Board with over £200 million of Government investment. Scientists, engineers and business innovators will be able to pool expertise, intelligence and experience on a nationwide scale and make a significant contribution to our economy.

Innovation has the potential to make a particularly rapid impact on the pace and cost of developing offshore wind. The centre is likely to cover the range of technologies involved in offshore wind power development, not only by transferring knowledge from the established engineering industries into areas such as foundations, installation, connection, operations and maintenance, but also by working with researchers and SMEs to evaluate and develop novel subsystems and components. As such it will build on UK strengths to take advantage of inward investment opportunities and establish a UK supply chain for the emerging offshore wind sector.

For more information please see https://catapult.innovateuk.org/offshore-renewable-energy

### Offshore Wind Programme Board

The Offshore Wind Programme Board was established at the recommendation of the Offshore Wind Cost Reduction Task Force in order to set out an action plan for reducing the levelised cost of offshore wind to £100 per MW/h by 2020.

With over 45GW of offshore wind that could be developed in the UK, a key milestone will be achieving this target cost. A cost effective local supply chain will have a major role to play and CORE will play a key role in the delivery of the Offshore Wind Programme Boards’ objectives through providing business support on the ground. This support will also extend to working with OEM’s, Tier 1 and 2 supply chain companies to optimise their operations and become globally competitive.
Skills and Labour Costs

The skills base within the UK offers a wide talent pool of students studying a range of subjects relevant to the offshore wind industry. In the academic year 2010-2011 there were 160,900 students studying engineering related subjects throughout the UK providing a solid base for recruitment in the sector.

England also has specialist training centres for the offshore industry. These include Siemens Energy Service Training Centre in Newcastle, Falck Nutec Offshore Safety and Survival Training Courses in Tees Valley and a highly successful apprenticeship scheme for offshore wind technicians at the Swale Skills Centre in Kent.

The North West Maritime and Engineering College and the forthcoming University Training College both in Birkenhead form part of the Marine Engineering campus along with Liverpool John Moores University, specialising in supporting apprentices and training. The University of Hull’s 3D virtual reality cave in Humber is being used to train wind turbine engineers in hostile, dangerous and complex conditions alongside HOTA which trains 5,000 people annually in offshore work.

All of the CORE areas have extensive training facilities for supporting industry. Whatever your needs, England has the universities, colleges and specialist training centres to service your needs.

England has a skilled and available workforce to support the offshore wind sector. There are also initiatives such as www.military2energy.com providing 74,000 service leavers per annum equipped with specialist skills that are transferrable to roles in the energy sector. The table below shows Total Labour Costs* (Pounds Sterling/£) in key European countries for a range of jobs related to the wind turbine manufacturing industry.

<table>
<thead>
<tr>
<th></th>
<th>UK</th>
<th>Netherlands</th>
<th>France</th>
<th>Denmark</th>
<th>Sweden</th>
<th>Norway</th>
<th>Belgium</th>
<th>Germany</th>
</tr>
</thead>
<tbody>
<tr>
<td>Head of Manufacturing</td>
<td>102,837</td>
<td>110,923</td>
<td>117,091</td>
<td>99,017</td>
<td>115,269</td>
<td>97,598</td>
<td>131,172</td>
<td>128,086</td>
</tr>
<tr>
<td>Production Manager</td>
<td>58,898</td>
<td>71,851</td>
<td>70,862</td>
<td>71,047</td>
<td>75,825</td>
<td>74,533</td>
<td>88,729</td>
<td>92,112</td>
</tr>
<tr>
<td>Production Operative (Highly Skilled)</td>
<td>23,286</td>
<td>32,885</td>
<td>32,112</td>
<td>40,938</td>
<td>39,992</td>
<td>45,240</td>
<td>45,237</td>
<td>44,485</td>
</tr>
<tr>
<td>Production Operative (Skilled)</td>
<td>19,706</td>
<td>28,598</td>
<td>28,144</td>
<td>37,420</td>
<td>35,046</td>
<td>40,294</td>
<td>40,228</td>
<td>38,848</td>
</tr>
<tr>
<td>Quality Control Manager</td>
<td>55,546</td>
<td>68,489</td>
<td>67,053</td>
<td>70,161</td>
<td>73,193</td>
<td>73,448</td>
<td>85,349</td>
<td>91,511</td>
</tr>
<tr>
<td>Quality Control Specialist</td>
<td>28,829</td>
<td>37,352</td>
<td>36,166</td>
<td>42,027</td>
<td>41,078</td>
<td>47,145</td>
<td>47,469</td>
<td>49,753</td>
</tr>
<tr>
<td>Engineer</td>
<td>32,596</td>
<td>42,234</td>
<td>40,893</td>
<td>47,519</td>
<td>46,447</td>
<td>53,306</td>
<td>53,673</td>
<td>56,256</td>
</tr>
<tr>
<td>Senior Engineer</td>
<td>41,380</td>
<td>49,909</td>
<td>50,197</td>
<td>54,202</td>
<td>55,542</td>
<td>55,744</td>
<td>62,945</td>
<td>67,025</td>
</tr>
<tr>
<td>Total Labour Costs</td>
<td>363,078</td>
<td>442,241</td>
<td>442,518</td>
<td>462,331</td>
<td>482,392</td>
<td>487,308</td>
<td>554,802</td>
<td>567,816</td>
</tr>
</tbody>
</table>

*Total Labour Costs include employee salaries plus additional labour costs to the firm such as social security etc.
Source: fDi Benchmark, a product of the Financial Times, January 2012
160,900 students studying subjects relevant to offshore wind

Hartlepool College wind turbine technology training and education, Tees Valley CORE.
Centres for Offshore Renewable Engineering (CORE)

In England there are locations that have been awarded CORE status by the UK Government. CORE status is awarded through recognising the existing port infrastructure, skills and supply chain to enable rapid growth within the offshore wind sector.

England has six CORE sites: these are the Great Yarmouth and Lowestoft CORE, the Humber CORE, the Kent CORE, the Liverpool City Region CORE, the North Eastern CORE and the Tees Valley CORE.

CORE areas provide:

- Excellent infrastructure and logistics
- Large amounts of available land for development including deep water access
- Skilled and available local workforce
- Experienced supply chain
- Easy access to Round 1, 2 and 3 offshore wind farms
- Extensive business support available
- Local government support providing free location finding services and assistance on skills, premises and grant funding applications.
The North Eastern CORE

This is an important hub for worldwide trade and investment, central to the UK’s economic growth for hundreds of years. The North Eastern CORE offers:

**Enterprise Zone** sites with Enhanced Capital Allowances up to £100 million, Business Rate Discount and simplified planning at the Port of Tyne and on the North Bank of the River Tyne, at the Port of Blyth and adjacent to Nissan’s Sunderland plant.

**Three Ports**
- **Port of Blyth** offers strategic sites and existing office accommodation, with well-established cargo handling, storage and distribution service for the renewables sector and Enterprise Zone support. [www.berez.org.uk](http://www.berez.org.uk)
- **Port of Tyne**, the largest trust port in the UK, offers 250 hectares of available land, 30 hectares carries Enterprise Zone status. [www.offshorewindtyne.com](http://www.offshorewindtyne.com)
- **Port of Sunderland** is well located for offshore energy investment with instant access from open sea to deep water river and dock berths, and offers 115 hectares of waterfront land for development. [www.portofsunderland.co.uk](http://www.portofsunderland.co.uk)

**Financial Support** - North Eastern Infrastructure Fund available to secure investment, job creation and economic growth in the local area, £30 million growth capital for investment and largest English regional venture capital offer.

**Supply Chain** - Over 250 North Eastern companies with existing commitment or potential to diversify into offshore wind supply. World leading offshore and subsea engineering and manufacturing supply chain, backed by national and regional professional services cluster in Newcastle.

**Skills and training** - Deep skilled workforce serviced by specialist training facilities at Siemens, Maersk and Shepherd Offshore.

**Connectivity** - Newcastle International Airport is within 20 miles of each port. Adjacent to largest Round 3 concession, and accessible to Forth and Humber sites. Two direct trains an hour to London, Edinburgh and the Midlands.

**The National Renewable Energy Centre**, Narec, is located in Blyth and provides the national research, development, testing and demonstration centre for offshore renewable energy technologies.
For more information or to request the full North Eastern CORE prospectus please contact:

Contact: Helen Golightly
Mobile: +44 (0)7900 226078
Email: Helen.Golightly@nelep.co.uk
Web: www.nelep.co.uk
The Tees Valley CORE

A prime location for offshore wind investment with long industrial heritage and a track record for delivering large scale projects in oil and gas, ship building, fabrication and decommissioning.

Tees Valley’s main strengths are in its prime land availability and existing supply chain. Tees Valley has the world’s largest cluster of subsea cabling and trenching companies, plus expert offshore fabrication facilities and also prime port sites ideally located for three of the world’s largest offshore wind projects.

16GW of wind farm development within 90 miles of port sites: Dogger Bank (9GW), Hornsea (4GW) and Firth of Forth (3.4GW).

Tees Valley provides an excellent European base for exporting to the continent as well as accessing UK markets. It also has close proximity to supply into North Eastern CORE, Humber CORE and Scottish supply chains.

12 Enterprise Zone sites (423 hectares) with simplified planning and Enhanced Capital Allowances (ECA) up to £100 million. The Enterprise Zone encompasses a wide range of sites including a number with existing units (11 office and six industrial units currently available, plus 12,500 square feet of smaller units). The sites include both new and established business and enterprise parks, plus large cleared industrial sites with access to utilities, port services and logistics.

Logistics: Take advantage of the largest exporting port in England, PD Teesport, including many available deep water port sites perfect for offshore wind manufacture and operation and maintenance. Tees Valley also has the fastest-flowing urban traffic speeds in the UK, integrated rail connected port sites and three international airports within one hour.

Skills: Take advantage of first class colleges and universities specialising in engineering courses, combined with local industry training providers including TTE, NETA, Faraday Centre, Teesside Industrial Solutions, TWI and Falck Nutec.

Affordable workforce: Wage rates in Tees Valley are on average 10% lower than the UK average.


With over 200 companies already in offshore wind, there are opportunities to locate within Tees Valley and supply into the existing supply chain covering all energy sectors.

Port Sites:
PD Ports Hartlepool, 300 acres including sites with ECAs and simplified planning www.pdports.co.uk
ABLE Seaton Port, 126 acres of land with the largest dry dock in Europe. www.ableuk.com
ABLE Middlesbrough Port, 40 acres of land with 200,000 sq ft of existing units inc cranage.
North Sea Supply Base, Multimodal logistics centre www.av-dawson.com
A&P Tees, Centre of Excellence for offshore vessels www.ap-group.co.uk
For more information or to request the full Tees Valley CORE prospectus please contact:

Contact: Steve Pugh
Tel: +44 (0)1642 524436
Email: steven.pugh@teesvalleyunlimited.gov.uk

Enterprise Zone
Contact: Fergus Mitchell
Tel: +44 (0)1642 524430
Email: fergus.mitchell@teesvalleyunlimited.gov.uk

Web: www.teesvalleyunlimited.gov.uk
The Humber
CORE

The Humber has brought power to the UK for decades in the form of coal, oil and gas. Today we are creating one of the world’s largest renewable energy clusters – from leading the UK in biofuels to driving innovation in tidal energy, and we’re well placed to capitalise on offshore wind opportunities.

The Humber is the closest to all three of the UK’s largest planned offshore wind farms. Centrica, RES and Siemens have already established an operations and maintenance base here to serve Rounds 1 and 2 offshore wind farms.

The UK’s largest deep water port-side development sites. At 484 hectares, the Humber Enterprise Zone is the largest in the country offering OEMs and their supply chains the opportunity to co-locate to make cost reductions on a major scale.

Fast track planning and financial incentives
A key benefit of development land within the Humber Enterprise Zone is the simplified planning process, tax breaks and £35 million Regional Growth Fund for training, R&D and capital investments.

Skills and expertise
We have 25,000 people employed in advanced and marine engineering and offer fabrication and assembly, port and portside services, turbine maintenance, vessel operation and maintenance, turbine access and safety, and logistics.

Specialist engineers Spencer Group delivering civil infrastructure works for the onshore substation, to feed electricity generated by E.ON’s Humber Gateway Offshore Wind farm into the national grid.

Danish company Blue Water Danbrit UK invested in the Humber in 2011 to provide logistics services for the UK wind industry.

Tata Steel, providing steel plate for wind towers.

England’s busiest Heliport carrying personnel and high value electronic components to offshore North Sea operations.
Able UK is investing £400 million in Able Marine Energy Park, a purpose built port facility available from 2014 for the Offshore Marine Renewables Sector – particularly Offshore Wind. www.ablehumberport.com/marineenergypark.htm

For more information or to request the full Humber CORE prospectus please contact:

Contact: Richard Kendall
Tel: +44 (0)1482 485260
Email: r.kendall@humberlep.org
Web: www.thehumber.com
Liverpool City Region CORE

Liverpool City Region is the leading centre for marine energy on the UK’s West Coast. It offers a globally connected port, world renowned marine fabrication facilities and a large engineering talent pool all of which are immediately available.

Liverpool City Region – only CORE area on the West Coast

• Close proximity to the Irish Sea Round 3 offshore wind sites - reduced transport costs and quick turn around times.

• RWE already based here for the installation and technical support of Irish Sea offshore wind farms.

• A centre for companies such as ABB, Siemens, DONG Energy, Maersk, Bibby, Jaguar Land Rover, UTC and Unilever.

Port and Manufacturing Facilities

• Largest West Coast port complex alongside two international airports with direct shipping and air services to key European and global centres.

• Cammell Laird offers the largest heavy fabrication, marine engineering and maintenance base port facilities on the UK’s West Coast. www.cammell-laird.com

• Extensive supply chain of relevant companies - centre of excellence for specialist marine related engineering. Proven local business support programmes.

Experienced Skills Base

• Highly skilled workforce - engineering and manufacturing expertise, full array of shipyard skills.

• Extensive local training - Integrated Marine Engineering Campus including Liverpool John Moores University, Birkenhead University Technical College and the North West Maritime and Engineering College. www.mecnw.co.uk

Financial Incentives

• New dedicated Regional Growth Fund to offer direct financial support to marine energy companies locating in the Wirral area of the City Region.

• £30 million local urban development fund for investment.

• Assisted Area status and Enterprise Zone status – including business rate relief and Enhanced Capital Allowances for plant and machinery. www.peelez.co.uk

Streamlined planning and regulatory processes

• UK Government Low Carbon Regulatory Pilot Area focused on reducing regulatory burdens thereby expediting marine infrastructure projects, reducing delays and costs.

By utilising existing, proven facilities and expertise, the Liverpool City Region offers a lower cost and lower risk delivery solution for marine engineering projects.
For more information or to request the full Liverpool City Region CORE prospectus please contact:

Contact:  Mark Knowles  
Tel:  +44 (0)151 237 3949  
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The Great Yarmouth and Lowestoft CORE

Great Yarmouth and Lowestoft together form the primary focus of the East of England Energy Zone – one of the world’s largest and most diverse clusters of energy businesses. The East of England Energy Zone is the all energy location. With 50 years’ experience in offshore and marine operations in the southern North Sea, the two towns, plus other key assets in the East of England, are home to an energy industry that spans all sectors with a well-established and sizeable supply chain and workforce.

Unrivalled Skills and Capability:
• Around 6,200 businesses are currently active in the region from all energy sectors including oil and gas, civil nuclear, wind and biomass, and between them are responsible for a total annual turnover of £12.9 billion and the employment of approximately 103,400 people.

Ideal Port Facilities
• Two ports (Great Yarmouth and Lowestoft) with complementary facilities – England’s leading ports, supporting the offshore energy sector in the Southern North Sea for 50 years, and which are the closest deep-water ports to the East Anglia Array wind farm, a 7,200 MW, 1,200 turbine development - only 44km from the East Anglia coast.
• Commercial premises and port related land with quayside infrastructure with Enterprise Zone status providing up to £0.275 million per business in rate relief, plus other advantages.

The Perfect Location
• The two towns are the closest ports to over £50 billion of capital expenditure to be invested in offshore wind; oil and gas exploration and extraction; nuclear (new build and decommissioning); gas storage; and platform decommissioning over the next 20 years.

• Easy access to the Round 3 Hornsea and Dogger Bank developments and many Round 2 developments.

Incubation Facilities
• Dedicated innovation, incubation and high-specification office facilities for the energy sector supporting new business and investors to establish a footprint in the East of England Energy Zone. Beacon Innovation Centre (www.nwes.org.uk/premises.aspx) in Great Yarmouth, and OrbisEnergy (www.orbisenergy.net) in Lowestoft at Britain’s most easterly point, offer companies flexible tenancies and fully serviced accommodation.

Commitment to Support the Sector
• Political and business community commitment, established through the Norfolk and Suffolk Energy Alliance.
• The primary sector for the New Anglia Local Enterprise Partnership. www.newanglia.co.uk
• A dedicated “soft landing” package through our Offshore Energy Support Team.
• A dedicated energy industry trade association, the East of England Energy Group www.eeegr.com – through which to reach experienced supply chain partners.
Building Offshore Wind in England

For more information or to request the full Great Yarmouth and Lowestoft CORE prospectus please contact:

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The Kent
CORE

A strategic location ideally positioned for rapid access to offshore wind opportunities in the North Sea, English Channel and wider European markets.

**Manufacturing:** The Medway Superhub offers 338 hectares of suitably sized sites with deep water access to accommodate the manufacture, assembly, storage and distribution of blades, gearboxes, nacelles, towers and foundations for offshore wind turbines, together with other associated supply chain operations.

Included in this offer are two deep water port sites situated on opposite sides of the River Medway, within 10 minutes from each other by water:

- The **Port of Sheerness** offers a 70 hectares site that has already obtained planning permission for an integrated wind turbine manufacturing facility.

- **London Thamesport** offers 16 hectares of development land plus additional operational land and four x 4,000 sqm bonded warehouses. It also serves as the Gateway to the Isle of Grain site of 149 hectares.

**Operations & Maintenance:** The Ports of Ramsgate and Whitstable are established and growing O&M bases which have benefited from major investment in bespoke O&M facilities by Vattenfall and Vestas (Thanet Offshore, Kentish Flats) and London Array, Siemens and Visser & Smit (London Array).

**Strong Skills Base:** A deep talent pool of appropriate manufacturing, technical and engineering skills with key strengths in mechanical, electrical and electronic engineering.

**Education & Training:** Extensive local training available including a highly successful industry supported apprenticeship scheme for offshore wind technicians at the Swale Skills Centre.

**Supply Chain:** A strong presence of relevant supply chain companies and an extensive network of business support organisations to help develop the supply chain. A growing web based directory of companies is available on www.kentwindenergy.co.uk.

**Financial Support:** £55 million funding support available in Kent & Medway through the Government’s Regional Growth Fund, in addition to Enterprise Zone status at Discovery Park.

**Connectivity:** An excellent multimodal transport network connecting Kent & Medway to UK, European and Global markets, including high speed rail links to London and the Continent, and five international airports within one hour travelling time.
For more information or to request the full Kent CORE prospectus please contact:

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UK is the biggest offshore wind market in the world
46GW in operation, construction or development

Summary

Choosing England as a location provides your business with everything it needs to be globally successful. Benefit from the highly supportive business environment, favourable tax regime, world centres of excellence, skilled available workforce, strong economy and government which supports business investment.

England can also be your hub to the world. Gain access to excellent logistics for road, rail, air and sea, easy access to the UK’s offshore wind Round 1, 2 and 3 developments and also to supply into the wider European supply chains.

England is open for business and looking for potential joint ventures, inward investment, partnering opportunities and developing new trade links with the world.

We have the ambition to remain the world leader in offshore wind. With the opportunity presented by the renewable energy sector, through providing support to existing businesses and assisting inward investment through the COREs, our aim is for England to remain at the forefront of the global low carbon energy revolution.
Achieving success in challenging times
A connected, credible and exciting place to invest.

The Crown Estate is a diverse property business valued at more than £8 billion. We have been trusted to manage a wide range of properties across the UK including commercial and retail properties. In the country, it includes agricultural land, parkland and forestry. It includes shopping centres, business parks, farms and housing. And we have over half the foreshore and almost all of the seabed around the UK. This brochure was kindly funded by The Crown Estate.

www.thecrownestate.co.uk

To make a general enquiry about investing in the England please contact UKTI Investment services team.

Web: www.ukti.gov.uk/invest Email: enquiries@ukti-invest.com
Telephone: from outside the UK +44 (0)20 7333 5442, from inside the UK +44 (0)845 539 0419.

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Invest in offshore wind

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