

Eastern opportunity for future renewable energy transition



Located on England's east coast, Peel Ports Great Yarmouth is a one-stop-shop for handling pre-assembly, O&M and manufacturing opportunities, simultaneously, making it 'like no other UK port location', according to Port Director Richard Goffin. PES takes a look at why having such a highly experienced site available to handle major offshore projects is of growing importance.



The UK Government's Build Back Greener strategy and target to become net zero by 2050 are ambitious, and so they should be. The challenges brought on by the war in Ukraine and Europe's reliance on Russian oil and gas have rightly made us all look at energy again with a renewed sense of urgency.

The British Energy Security Strategy aims to secure clean and affordable energy for the

long term. This is so we can become 'energy independent' and move away from foreign energy sources, through wind, solar, nuclear and by giving some North Sea energy fields a new lease of life.

The Prime Minister outlines the need to work with industry and slash through red tape, so the programme can develop with the urgency and speed it needs. Then businesses and

consumers can look forward to enjoying reliable, green and affordable energy now and in the future.

Levelling up is also key to the government agenda, yet we must not forget east and west as we do so. The need for coastal communities to benefit from the next wave of offshore wind developments must be fairly balanced and provide opportunities for all

regions which are currently underrepresented in the UK economy.

Peel Ports, one of the largest port operators in the UK, commissioned a significant and independent research study into the renewable energy market in 2021. Three of its sites were identified as offering an advantageous location, capability and capacity as platforms for the development and maintenance of offshore wind farms.

In response to this study, Peel Ports has launched its Energy Transition Hubs. The Ports of Hunterston PARC, King George V Dock in Clydeport and Great Yarmouth in Norfolk are presented as key location sites for both the decommissioning of ageing oil and gas assets and the next wave of offshore wind developments and maintenance.

Richard Goffin, Port Director, South East cluster, at Peel Ports Group says: 'Norfolk's close proximity to southern North Sea energy markets and European offshore energy clusters, alongside the shallow water and ideal weather conditions of the SNS, offer offshore wind developers and their supply chains the perfect business environment built on solid expertise and experience in the sector.

'Great Yarmouth, on the south east coast, is

the Grande Dame of renewable energy, with over 60 years' experience in the sector. It is a multi-purpose 24/7 port hugely experienced in handling supplies for the offshore energy, automotive, decommissioning, agri-bulk, timber, steel, project cargoes and aggregates markets. With a modern deep-water outer harbour and an established river port, we have a track record of successfully supporting and partnering with our customers across a range of sectors.

'It has been the base site for servicing some of the largest and most ambitious offshore wind projects to date, including RWE's Galloper and Scottish Power Renewables East Anglia One developments.

'Large offshore substructures are no issue for our facilities, which can accommodate large heavy lift vessels and we are proud to simultaneously operate multiple large scale projects from the Port. Recently we oversaw the preassembly and construction Port for East Anglia One Windfarm in tandem with decommissioning projects.

'Much of the focus for the role of ports in renewable energy seems to be on the volume of land available and potential manufacturers are directed to areas such as Humber, Teesside and the wider North East region. However, this approach carries the risk of

lack of capacity for pre-assembly and delays at these locations, with the potential to drive away activity from the UK, increasing costs for developers. Great Yarmouth is 'shovel-ready' now.'

With existing and readily developable capacity at Great Yarmouth as a pre-assembly site, the benefits in savings, reduced operating costs and delivery days are significant compared to other ports.

To illustrate this, Peel Ports Great Yarmouth carried out a study for supporting a leading OEM in the potential delivery of 12.3GW and this highlighted the following savings compared to other locations:

- Vlissingen: £37m to £65m savings in operational costs and 76 to 126 days reduced installation time
- Esbjerg: £110m to £183m savings in operational costs and 220 to 364 in days reduced installation time
- Hull: £35m to £39m savings in operational costs and 71 to 116 in days reduced installation time

In addition, Great Yarmouth would be able to deliver through its existing capability, with some further development works within existing statutory planning consent as a





pre-assembly storage site with a land footprint in excess of 20ha.

It would offer a minimum of two dedicated load out locations, with access to 700m of deep-water quays to ensure access for multiple Wind Turbine Installation Vessels and ancillary support vessels.

Two RoRo berths, as a minimum, provide the ability for delivery of components to the site, with access to facilities for commissioning vessels and construction support works.

Great Yarmouth's new Operations & Maintenance (O&M) campus is currently being developed at the entrance of the river port and will offer an incubator hub for SMEs, innovators and start ups to nurture an ecosystem of supplier support businesses for major offshore projects.

The new O&M Campus is entirely flexible at this stage, but can provide up to 32,000 square metres of prime space, including over 23,000 for industrial and commercial floorspace and 8,000 for exterior, laydown and storage.

All this, in addition to the benefits of secure 24/7 operational and navigational access

with no land-based transport restrictions, lock gates or air draft limitations. Reduced time also brings additional benefits beyond the lowering of risks, such as CO₂ emission reductions to make the development of projects themselves as carbon neutral as they can be.

With solid experience in its capacity and capability to deliver onsite manufacturing of components such as towers, Great Yarmouth reduces logistic and delivery risks and would also be well supported by local stakeholders and public funders.

Investment decisions must consider the combined benefits of the wider offshore wind pre-assembly with manufacturing and O&M within a single location.

Great Yarmouth offers a real prospect in enabling future renewable energy projects, both bottom fixed and floating offshore wind developments to support the UK and its targets of 40GW by 2030 and in becoming net zero by 2050.

Richard Goffin adds: 'The UK Government must look beyond the north east in order to achieve its energy ambitions with more urgency. Regional energy clusters exist

elsewhere and can be ready for development faster with options to deliver scale without the need of extensive land requirements.'

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Richard Goffin and the Great Yarmouth Energy Transition Team will be exhibiting on stand 223 at Global Offshore Wind from 21-22 June at Manchester Central.