Scotland's renewable future runs deep

Having previously featured Peel Ports and its initiatives, PES was delighted to hear from James McSporran, Port Director at Clydeport, about the Hunterston PARC Site in Scotland. Operational since the 1970s, how has the port evolved to support large-scale renewable projects as it does today?

PES: It's lovely to speak with you James. Firstly, can you give some background to the site, its location and why it's such an important part of the Peel Ports portfolio?

James McSporran: Hunterston was developed as an iron ore bulk terminal and became fully operational in the early 1970s. Based in Ayrshire on the west coast of Scotland, it was importing and shipping material to Ravenscraig and in turn supplying sheet steel to the Chrysler plant in Linwood.

The site then moved to coal importation, grading and forward shipping, primarily to the furnaces at Ravenscraig, but also the coal-fired power stations at Longannet. In 2016, Longannet closed its doors and Hunterston, from a peak of handling 10.3 million tonnes of coal transportation a year, ceased all operations. Since 2016 the site has been fully remediated to embrace a future in the blue and green economy, working with energy, renewables and aquaculture businesses to shape its future.

Today, the site has 320 acres of brownfield land, with the largest deep water jetty in Europe and a drydock which is one of the largest in the UK. It has a dedicated railhead, with access to the national grid and is ideally placed to support large-scale renewable projects in the west coast of Scotland as well as Celtic and Irish sea developments.

PES: The port has been earmarked by the Government as one of the most significant inward investment opportunities in the UK hasn't it?

JM: The UK is at the forefront of developing new technology for floating wind assets that can be used in deep water. A recent report[1] commissioned by the Scottish government, highlighted the need for additional capacity in the Scottish offshore wind industry. The report recommended an additional 22 hectares of port capacity could deliver £1.5bn in economic benefit, and attract a further £4.5bn of investment.

Hunterston PARC has been described by the UK government as a shovel-ready opportunity to invest in the re-commissioning of one of Europe's largest dry docks, which provides much needed capacity to the UK's growing offshore, fixed and floating wind farm industry.

With superb connectivity to rail and road networks, close proximity to international airports and access to local talent and skills drawn from the Clyde's rich maritime history and engineering expertise, Hunterston PARC is well positioned to support major projects to deliver the UK's net zero ambitions.

PES: What's the overall vision for Hunterston PARC and how does the wind sector fit in with that?

JM: Our vision is to create a significant

1 Scottish Offshore Wind Strategic Investment Assessment, SOWEC 2021

national Energy and Marine Campus, bringing together leading industry operators, world-class academia and the latest innovators to deliver technological advances in renewable energy and aquaculture.

The ScotWind programme aims to develop a strong Scottish renewable portfolio to reduce our carbon footprint and deliver green energy for generations to come, helping to reach Scotland's net zero target by 2045.

It seeks to generate 25GW of new, clean energy from Scottish projects. These will also create many opportunities to develop a strong local network for the manufacture, assembly, testing, and deployment of the next generation of fixed and floating offshore wind turbines, bringing much needed investment and delivering new quality jobs.

Hunterston, with its advantageous suite of assets, is uniquely placed to deliver this for Scotland.

PES: What are the hub's main capabilities?

JM: The site has 320 acres of available brownfield land and 200 acres of contiguous land with plot sizes able to accommodate up to 4 million square feet. It has a deep water jetty capable of supporting the very largest vessels.

In addition, we have 440 metres of jetty length which sits in 38 metres of water depth. The site also boasts a drydock which is 250 x 150 x 13 metres allowing the floating out of very large structures.

There is ample connectivity via sea and road and its own dedicated on-site railhead. Hunterston also benefits from favourable planning status with significant support from the UK and Scottish governments.

PES: Can you describe the infrastructure for offshore wind that is in place so far and how you expect this to develop in the future?

JM: Hunterston is set to play a key role in connecting low-cost, green energy from renewable projects around the world.

With its deep water jetty, the drydock and the availability of extensive land for development, the site offers the only location able to deliver new opportunities for manufacturing, assembly testing and the deployment arena.

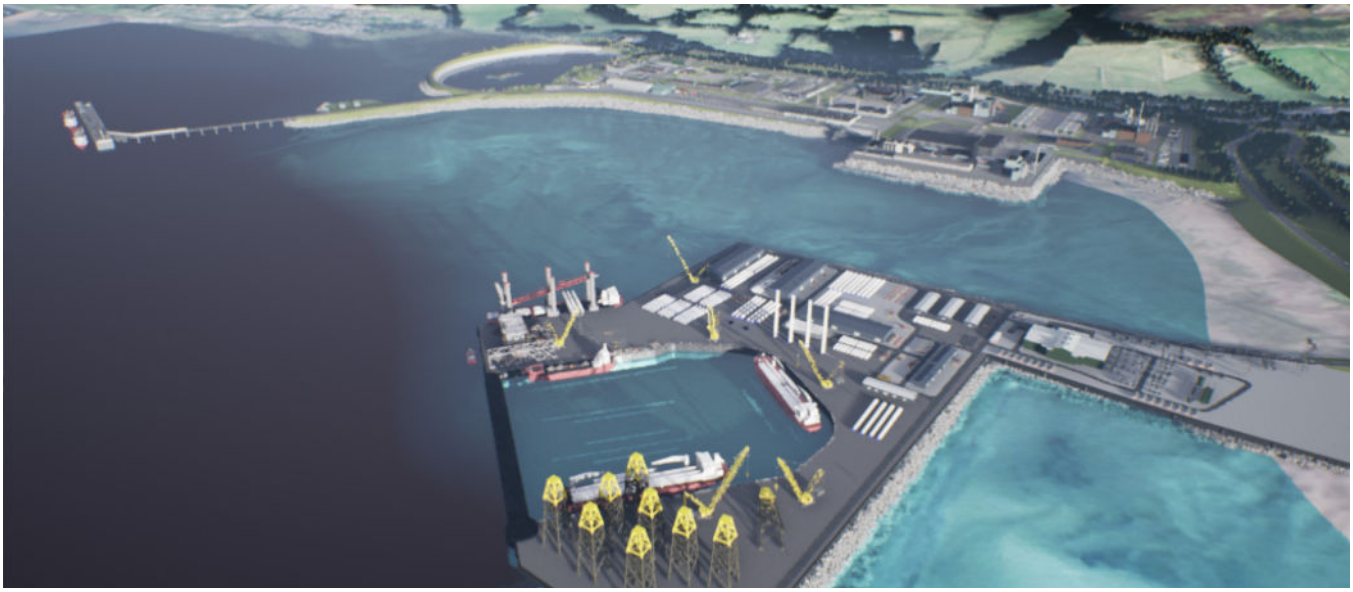
Hunterston has a number of exciting new projects in the pipeline, including XLCC's HVDC subsea cable manufacturing which, once operational, will create a new UK industry to support global decarbonisation targets, creating up to 900 jobs in the area, with thousands more in the wider supply chain.

In addition, Hunterston will be helping to enable the transition to green shipping as one of the first sites for the testing of FastRig wingsails. These intelligent, retractable sails are retrofitted to bulk vessels and have the potential to reduce fuel consumption and greenhouse gas emissions by at least 20%, putting Scotland at the forefront of developing the sustainable maritime solutions of the future.

PES: How important is the capacity for pre-assembly, as well as focusing on the volume of land available? And does Hunterston PARC offer both?

Jim McSporran

JM: Capacity for pre-assembly is key and has been a stumbling block for other developments around the UK. The pre-assembly of as many components as possible helps to minimise the overall cost of offshore projects and mitigates against unpredictable weather conditions. To develop more opportunities through the entire process of an offshore wind project, we need to be involved in the manufacture, assembly testing and deployment. Hunterston can facilitate all of this due to its unique mix of capabilities and unrivalled location.



Hunterston offers vessel access alongside and beam, availability for anchorage for floating foundations, current and future cranage, quayside strength as well as extensive load-bearing laydown and assembly areas, pontoon space and possibilities for modular construction.

With a perfect location and this mix of assets, Hunterston has the potential to become a global centre for offshore wind turbine fabrication and assembly.

PES: In terms of job creation, the site will present employment opportunities locally too won't it?

JM: The support afforded to Hunterston in national and local policy, places it at the forefront of Scotland's strategy as a major contributor to the local economy.

Hunterston PARC has the potential to be a game-changer in transforming its current economic prospects to drive regeneration and bring prosperity to the west coast of Scotland.

It is expected that within the next few years Hunterston will create over 1,700 jobs in the local North Ayrshire community, much of this in renewable energy.

PES: Are there significant offshore wind opportunities still to be carried out on the west coast of Scotland? How big a role do you see this area of the country playing in the industry going forward?

JM: The recent ScotWind 1 project will be the first of many as most contracts for renewable projects have been focused on the North Sea; north, central and southern.

This project is likely to position Scotland as one of the largest markets in the world for emerging offshore wind technology and offers the opportunity for a great proportion of components to be manufactured there.

The Scottish government has committed to further ScotWind rounds in the next few years. Hunterston is ideally placed to support the level of growth expected.

PES: How quickly do you think the port will develop and how important a role do you think it will play in the future of offshore wind in this part of the world?

JM: The site has seen £10m worth of investment since 2016 to remediate and prepare for future projects, such as renewable energy developments. There is also significant inward investment expected in the next two to three years, upwards of £500m. The site is evolving fast and attracting much attention from offshore wind developers and other industries with an interest in the blue and green economy.

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