## £590M TIDAL LAGOON WILL CREATE 300 JOBS, POWER 82,000 HOMES AND HELP NORTH WALES ECONOMY RECOVER

Plans have been unveiled for a £590 million tidal lagoon capable of providing low carbon electricity to power 82,000 homes in North Wales.

Building the 6.7 kilometre long lagoon, stretching from the breakwater at Mostyn to Point of Ayr in Flintshire, would create 300 jobs during the construction phase and up to 30 high-skilled permanent posts.

It's being developed by Mostyn SeaPower Ltd, a subsidiary of the busy Port of Mostyn, who say it will provide a massive boost for the regional economy and play a key role in helping North Wales to recover from the economic downturn caused by the Covid-19 crisis.

The company will be using local labour and suppliers wherever possible and if everything goes according to plan, the turbines could be turning and producing energy by mid-2027.

As a relatively small scale renewable energy development, it's expected the scheme can pave the way for larger tidal power projects at other locations along the Welsh coastline with suitable tidal variations and fulfil the growing need to produce clean, green energy.

Mostyn SeaPower say the Dee Estuary is an ideal location because it has one of the highest tidal movements in the UK, as much as 10.2 metres during high spring tides, as well as having natural deep water for the installation of the turbines.

The lagoon wall will be two metres above sea level and another major benefit is that it will provide much-needed flood protection for the low-lying land along the coast which includes homes and businesses, the A548 Coast Road and the strategically important North Wales coast railway line which has suffered significant storm damage in recent years.

It will have two sets of turbine houses with three sluice gates to control the volume of water over the tidal cycle, along with lock gates allowing small vessels in and out of the

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> FIRST WIND TURBINES SUCCESSFULLY INSTALLED ON GWYNT Y MOR

PRESS RELEASE – NEW SUBSIDIARY COMPANY MOSTECH ENERGY SERVICES LTD

FIRST CALL OF THE GWYNT-Y-MOR TURBINE INSTALLATION VESSEL A2SEA JACK UP BARGE

> DELIVERY OF TURBINES FOR GWYNT-Y-MOR OFFSHORE WINDFARM COMMENCES

GWYNT-Y-MOR SITE PREPARATION WORKS UNDERWAY

WIND FARM CONFIRMS PORT OF

sheltered lagoon.

In total there will be eight 16 megawatt turbines which will generate 298 gigawatt hours of electricity annually from the lagoon which will enclose an area of 12.2 square kilometres and has a design life of more than 100 years.

The lagoon wall will have a road running along the top and a path that will be accessible to the public.

Unlike other forms of renewable energy, like wind and solar, which are subject to the intermittent vagaries of the weather, the tides are constant and predictable, offering a completely reliable supply of power.

Preparatory work, including environmental and ecological studies, has been taking place for four years and the lagoon will be designed to maintain navigational access for shipping.

Mostyn SeaPower has been working with engineering consultants Ban Nuttall from Camberley and environmental experts ABPMer, from Southampton and the company has already negotiated with the National Grid for the electricity to be used by the nearby Connah's Quay Power Station.

It is planned to submit an application to the UK Government for a Development Consent Order by the end of 2022 and get the green light a year later.

Jim O'Toole, the managing director of the Port of Mostyn, said: "The construction time for the lagoon wall, turbine housings and sluices will take approximately four years.

"Manufacturing of the turbines will take two years to complete and will be carried out in conjunction with the wall construction.

"The turbines will be assembled at the port and will be installed simultaneously with the lagoon wall.

"As each turbine is tested and commissioned it will be connected to the grid. First power is expected to be delivered to Connah's Quay in mid-2027 and project completion by the end of that year.

"During the construction phase in the order of 300 jobs will be created at the port and further employment will be secured in local companies providing quarrying, mechanical, electrical, hydraulic, steel supply and fabrication services.

"This will be the biggest infrastructure project North Wales has seen for a very long time

MOSTYN AS BASE FOR TURBINE INSTALLATION

NEW ADDITION TO THE THE PORT OF MOSTYN

GWYNT Y MOR TRANSFORMERS ARRIVE ON THE M.V. ANNETTE

NORTH WALES PORT SELECTED AS OPERATIONS AND MAINTENANCE BASE FOR 2 BILLION EURO GWYNT Y MOR WINDFARM

ROLLDOCK SUN DELIVERS WIND TURBINE COMPONENTS

SEAJACKS KRAKEN AND LEVIATHAN LOADING OUT FOR WALNEY 2

CLIPPER PACE CARRIES OUT TRIALS

SEA WORKER ARRIVES TO WORK ON THE WALNEY 1 PROJECT

WALNEY CONSTRUCTION VESSELS AT MOSTYN

WALNEY WIND TURBINES ARRIVE AT MOSTYN

GOLIATH MOBILISES FOR WALNEY

and it will provide a massive and timely boost for the regional economy to kick-start the recovery from the economic downturn caused by the coronavirus pandemic.

"During the long term operational phase, the project will directly employ between 25 and 30 local people in highly skilled positions with a further five or six people indirectly employed in supporting services.

"Since inception of the project four years ago there has been rapid advances in renewable energy generation.

"In particular, battery storage, hydrogen production and liquid air battery technologies have all developed to the extent they now offer opportunities to enhance the operational and commercial viability of tidal lagoons.

"We will therefore continue to keep abreast of these technological advances and should opportunities arise during the design stage we will look to incorporate them in the Mostyn project.

"The relatively small scale of the Mostyn SeaPower project will pave the way for future larger scaled projects around the Welsh coast."