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THE MARITIME KNOWLEDGE HUB

A £25m world class maritime centre of excellence, focused on innovation, engineering, knowledge creation, R&D, entrepreneurship, and training.

Supporting the Liverpool City Region's £5bn maritime ecosystem, the Maritime Knowledge Hub will focus on the incredible opportunities that decarbonisation of the global \$3trillion maritime sector brings. An internationally significant project, fully aligned with the Department for Transport's Maritime 2050 strategy and endorsed by successive Maritime Ministers.

Located in the largest and most exciting regeneration project in the UK and directly adjacent to the recently designated Wirral Tax Site within the Liverpool City Region Freeport.

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IN NOVATION COLLABORATION DECARBONISATION REGENERATION

City Region's maritime ecosystem is worth £5bn

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THE VISION

In a globalised world, it is the maritime industry that maintains trade, connects nations, and keeps warehouses and shops stocked with goods and materials. By 2030, it is estimated that the global industry will be worth a staggering \$3 trillion. To take advantage of this growth and play a major role within the global maritime industry requires a world-class centre of excellence.

Enter the Maritime Knowledge Hub

The Maritime Knowledge Hub will put the Liverpool City Region back at the heart of the global maritime industry. It will deliver immediate and long-term benefits for the region from new employment and training opportunities through to 'levelling up' and decarbonisation.

The ripple effect

The Maritime Knowledge Hub will create hundreds of immediate job opportunities and that is just the start.

The project will support and boost the regional maritime economy which, at present, has a £5bn turnover and supports over 48,000 jobs across a range of sub-sectors including ports, shipping, offshore, engineering, professional services, logistics, manufacturing and academia.

The vision includes supporting the creation of over 4,000 additional jobs across the maritime sector.

Livenpool City Region's maritime economy supports over 48,000 jobs

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Government backed

The Maritime Knowledge Hub is aligned to the Department for Transport's Maritime 2050 strategy and has been consistently endorsed by four successive Maritime Ministers. The project will provide internationally significant innovation in support of the Liverpool City Region Freeport and is a key project for both Wirral Council and the Liverpool City Region Combined Authority.

Collaboration across the region

The Maritime Knowledge Hub will make a significant contribution to the region's economy. But not in isolation. Wirral Waters and the Maritime Knowledge Hub sit within a network of strategically important economic assets which are set to power the growth of the Liverpool City Region over the coming decades. Working collaboratively, these economic assets will address the region's industrial skills and knowledge gap and make the region one of the best in the UK to do business.

> INNOVATION COLLABORATION DECARBONISATION REGENERATION

MARITIME AND MARITIME SECTORS

The KMatrix / Gyron Research indicates 33 subsectors in the marine & maritime sectors.

LIVERPOOL WIRRAL

L2 Post Panamax Container Facility

Liverpool Professional Services

Universities and Research

Research, Energy and Global Shipping

Ferries, Cruise Liners and Leisure

Ship Building and Marine Engineering

R&D, Training and Knowledge Transfer

Wirral Waters and Mea Park

33 Maritime Sub Sectors

- Aggregates and Minerals
- Blue Biotech
- Business Services
- Cables
- Commercial Fishing & Fisheries · Offshore Energy & Ocean
- Defence
- Desalination
- Education & Training
- General Ship Building and Ship Repair & Conversion
- Industrial & Engineering
 Vessels
- Legislative Advice
- Leisure, Recreation & Tourism
- Marinas & Clubs
- Marine Conservation
- Marine Construction
- Marine Environment

- Marine ICT
- Marine Renewables
- Maritime Security
- Navigation and safety
- Offshore Energy & Ocean
 Services
- Oil & Gas
- Other International Consultancy
 NEC
- Passenger Transport
- Pipes
- Ports and Terminals
- Powerboats
- •R&D
- Sailing Industry
- Small boats & Water Craft
- Underwater Craft
- Work Boats & Services
- Yachts



Al Supercomputer

Maritime Digital Hub (MDH) is collaborating with Mersey Maritime and others to open up access to a new AI Supercomputer to firms across the £5bn regional maritime industry.

Supercomputers are an invaluable resource when it comes to testing new innovations. However, access to such facilities is often limited to academics and organisations with larger R&D budgets.

MDH is designed to bridge the gap between the worlds of maritime and technology, helping to enable conversations about the unique challenges and opportunities. The collaboration with Mersey Maritime aims to drive to both decarbonise and encourage the use of technologies such as automation and artificial intelligence (AI) – arguably one of the biggest economic opportunities for the country in the years ahead.

INNOVATION IN ACTION

The Maritime Knowledge Hub will be a hub for innovative and collaborative initiatives and projects that will drive the growth of the maritime and associated sector.



WaveMaster

Bibby Marine's WaveMaster Zero C project (WMZC) is an innovative study that aims to find the best-suited low or zero-emission fuel for the next generation of Net Zero Carbon Service Operation Vessels (SOVs) to support the Wind Energy arrays in the Liverpool Bay / Irish Sea but with export potential. The project has considered the technical, environmental, and economic challenges facing a transition to zero carbon shipping.

The outcomes of the project will act as a basis to produce a demonstrator vessel and ultimately showcase UK leadership in the design and manufacture of industry leading battery powered, Net Zero Carbon vessels.



Existing Hydraulic Tower

A legacy of maritime innovation

The existing historic building was a copy of the Palazzo Vecchio in Florence, the 12th century centre of Florentine Government and housed a hydraulic based power station utilising state of the art Victorian engineering. It was the first centrally based port hydraulics system that operated the bridges, sluices, cranes and capstans within the Port of Birkenhead.

For eight decades, the Hydraulic Tower and Engine House at the Birkenhead Docks have stood derelict, awaiting a new lease of life. Now award-winning Liverpool architects Ellis Williams and their design team, are working to preserve and enhance the maritime heritage of these iconic structures and bring the Maritime Knowledge Hub to life.

Maritime Knowledge Hub Tower Road View

> The architects are committed to breathing new life back into the Grade II listed buildings, whilst protecting the heritage and history of the Jesse Hartley designed structures. The 19th century Hydraulic Tower will retain as much of its original character as possible.

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THE PLAN

Featuring approximately 60,000 sq ft of highly sustainable floorspace, the Maritime Knowledge Hub will house meeting and workspaces, innovation, R&D and laboratory accommodation, a café/restaurant and visitor/events portal.

The flexible space will offer prospective occupiers a range of bespoke suites of differing sizes and specifications. A walled garden and a roof terrace will also provide views over Wirral Waters and to Liverpool's iconic waterfront skyline.

The Maritime Knowledge Hub will be an international beacon of progressive maritime thinking and action.

From marine engineering research and development to teaching, training and business accelerator space, the Maritime Knowledge Hub will act as the central base for UK maritime entrepreneurs, providing a unique facility for the sector which currently does not exist.



Working alongside LCR Freeport, Liverpool John Moores University and the University of Liverpool, we aim the make the Maritime Knowledge Hub a focal point for collaborative innovation and training the next generation of maritime professionals. This aims to meet the challenges of engineering net zero and transformation across the maritime sector through digital and AI. Here are able to draw on regional R&D assets including the National Oceanography Centre, Sci-Tech Daresbury and STFC Hartree, as well as Higher Education Institutions centre of excellence such as the material innovation factory, the digital innovation facility and the maritime bridge simulator.

Burbo Bank Offshore Wind Farm

BIRKENHEAD

Engineering College 🔘 Wirral Met College

Cammell Laird 🔘



The Port of Liverpool

LIVERPOOL

Materials Innovation Factory Manufacturing Technology Centre University of Liverpool Liverpool John Moores University National Oceanography Centre Digitial Innovation Facility Maritime Bridge Simulator

STFC Hartree

Sci-Tech Daresbury

ST HELENS

O HyNet at Stanlow

O Protos

WARRINGTON

Lifting the lid...

On any given week inside the Maritime Knowledge Hub, you will find a range of activities taking place that will help to address the industry challenges of the marine and maritime sectors including:

- $\boldsymbol{\cdot}$ Decarbonisation of the sector
- Technology transfer
- Future skills and labour requirements
- Digital and AI adoption

Activities will include:

- A mix of marine and maritime businesses, large and small, developing and delivering their products and services.
- Proactive collaboration between the private and public sectors, and leading academics from top universities, delivering a series of research and development projects looking at, amongst other things, the international significant imperative to decarbonise the maritime sector.
- An Innovation Programme led by a mix of private enterprises and academics that will drive and steer collaborations between sectors.
- Organisations collaborating on the funding and financing of new innovations and initiatives.
- Industry led thought leadership events, bringing together different organisations to examine different aspects of the marine and maritime sector.
- Informal networking and idea generation all whilst enjoying locally produced food and drink in the café and restaurant.
- Education programmes informing, engaging, and inspiring the next generation of maritime industry leaders and innovators.
- Visitor programmes engaging with local residents and international visitors alike about the maritime industry-past, present and future.



Research Backed

Significant research has been undertaken over many years to assess the need and demand for a facility like the Maritime Knowledge Hub.

This includes the K Matrix/Gyron and Centre for Economics and Business Research (Cebr) economic impact analysis work that provides the most comprehensive and up to date research documents into the maritime sector in the Liverpool City Region. This research has revealed the

33 subsectors and the levels of R&D and skills development required across the industry. The research also highlighted the scale of the maritime sector regionally and how much the sector could bring into the economy locally, regionally and nationally in the future.

The Maritime Knowledge Hub will play a significant role in realising the potential of the sector.

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The project will be developed in partnership between Peel L&P, the Liverpool City Region Combined Authority, Wirral Council, Mersey Maritime and key occupiers.

Funding will be secured from Peel L&P, private funding partners, the Wirral Waters Investment Fund and the Liverpool City Region Combined Authority.

Peel L&P will act as developer, with Mersey Maritime leading sector engagement.



Mersey Maritime

Mersey Maritime is an awardwinning regional cluster organisation for the maritime industry in the Liverpool City Region and the greater North West. Its mission is to be a catalyst for growth, influencing policy and driving change for the good of the sector.

Mersey Maritime was conceived twenty years ago to create an ecosystem, championing and supporting one of the most diverse maritime regions in the UK. Created as a not-for-profit organisation with more than 200 active members, it spans more than 33 sub-sectors of maritime and its related supply chain including ports, shipping, offshore, engineering, professional services, logistics, manufacturing and academia.

INNOVATION COLLABORATION DECARBONISATION REGENERATION

Peel L&P

Operating across the UK for over 50 years, the family run, Peel Group, and its regeneration arm Peel L&P, have been fortunate to have had the opportunity to reimagine some of the country's historic assets.

Peel L&P has a track record of transformative and exciting developments, including MediaCity, bringing the BBC to the North, and starting a trailblazing project to give homeless people their own front door at Manchester's Embassy Village. Peel L&P are helping to decarbonise industry and generate low carbon energy at Protos and through its Peel NRE business.

Working with local partners, schemes like Wirral Waters and Liverpool Waters are regenerating waterfront destinations into mixed-use sustainable communities.





THE PLACE

Wirral Waters is the largest and most exciting regeneration project in the UK. Revitalising 300 acres of former dockland, Wirral Waters is a pioneering, mixed use, highly sustainable, waterside city extension.

Wirral Waters will transform the derelict site into a sustainable location for local and international businesses, creating more than 20,000 permanent jobs for the Liverpool City Region, as well as offering new housing opportunities.

The project is supported by central government and was designated Enterprise Zone status in 2011 – one of the first four Enterprise Zones in the UK and known as the Mersey Waters Enterprise Zone. The development of new homes on this brownfield site has been supported by Homes England, and recently the Mea Park neighbourhood within Wirral Waters became part of the newly designated Tax Site within the Liverpool City Region Freeport.

> INNOVATION COLLABORATION DECARBONISATION REGENERATION

Meet the neighbours...

The Maritime Knowledge Hub will sit within the Four Bridges neighbourhood at Wirral Waters. Four Bridges was the first new neighbourhood area to emerge and is quickly becoming a fantastic mixed-use low carbon exemplar neighbourhood.

Four Bridges now includes:

- **hythe** a brand new, 25,000 sq ft Grade A office. Designed by award winning architects Glenn Howells, hythe holds the highest standards in sustainability with a BREEAM-Excellent rating.
- Wirral Met College's Construction Campus a 38,000 sq ft facility built to deliver the next generation of construction professionals, the project won a RIBA Regional Award and a RIBA National Award!
- **Kingsgate** Kingsgate is a 48,000 sq ft office project fully occupied by a local Wirral company.
- The Tower Road streetscape running through Four Bridges is Tower Road. With work completed in 2021, the street has been transformed into a high quality, safe, flood resilient attractive new place designed to give priority to pedestrians and cyclists, while attracting new business, workers, students and visitors alike.
- The neighbourhood will soon benefit from **Egerton Village** a waterside retail, cafe, arts and studio space, providing local amenities for existing and new residents, students and workers that are starting to populate Four Bridges.

Mea Park - world class industrial facilities

The Mea Park neighbourhood is focused on providing world class facilities for key industries including energy and renewable energy, automotive, aerospace, distribution and advanced manufacturing. The waterside site, with direct access to the Motorway network will comprise 1m sq. ft of industrial space, including a waterside manufacturing, logistics, R&D and assembly campus.

Mea Park falls under the Liverpool City Region Freeport, with the Mea Park neighbourhood benefitting from being within the designated Wirral Tax Site boundary. The project, focuses on supply chains, MMC in housing (modern methods of construction), manufacturing, logistics and innovation.

Businesses choosing to locate in these areas may qualify for additional support including tax reliefs and customs benefits:

Tax Reliefs

Customs

Tariff benefits
Trade benefits

VAT benefits

- Enhanced Structures & Building Allowances
- NIC Relief
- Stamp Duty Relief
- Business Rates Relief
- Enhanced Capital Allowances

The space offered across the Mea Park campus, used in conjunction with flexible and collaborative spaces such as hythe and the Maritime Knowledge Hub, is proving to be of interest to growing innovative businesses.

Image of Mea Park



Northbank - an inclusive and sustainable residential neighbourhood

Across the water from the Maritime Knowledge Hub is the emerging Northbank neighbourhood; a diverse, inclusive and sustainable new community. Encompassing a range of different developments, Northbank will deliver over 1,100 new homes by 2025.

Redbridge Quay

The neighbourhood will include:

- Two new **pocket parks**, including the already complete Northbank Green, dockside walkways and cycle routes creating a green, sustainable place to live that seeks to promote physical activity and active travel.
- Millers Quay currently under construction, the project will deliver 500 sustainable one and two-bedroom waterfront apartments, including 100 affordable new homes.
- **Redbridge Quay** delivering approximately 350 mixed typology energy efficient new homes. The first phase is complete and new residents have moved in.

CONNECTED

Wirral Waters offers a high profile location with excellent access to the M53, and regional motorway network. The Queensway and Kingsway Tunnels linking the Wirral to Liverpool are in close proximity.

The Merseyrail network is also within walking distance, with direct links via Liverpool Lime Street to London Euston and the West Coast Main Line.

COLLABORATION DECARBONISATION REGENERATION



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"I was delighted to visit Wirral Waters and the Maritime Knowledge Hub this week. A key part of growing our world class maritime industry is its people, and the Maritime Knowledge Hub will be vital in training the next generation of mariners and ensuring our industry continues to thrive."

Nusrat Ghani MP, Maritime Minister 2018 - 2020, speaking in January 2020





GOVERNMENT SUPPORT

The wider Wirral Waters regeneration project is supported by central government and was designated Enterprise Zone status in 2011. The development of new homes on this brownfield site has been supported by Homes England, and the recently designated Tax Site within the Liverpool City Region Freeport includes the Mea Park neighbourhood within Wirral Waters.

The Maritime Knowledge Hub is a nationally significant project, backed by the Department for Transport's Maritime 2050 strategy and consistently endorsed by successive Maritime Ministers.



LET'S MAKE IT HAPPEN

The Maritime Knowledge Hub will turn the tide in favour of the UK's marine and maritime industries.

Next steps for 2023:

- Agree Heads of Terms with partner occupiers.
- Set Delivery Programme.
- Progress and secure SIF and WWIF grants.
- Progress to RIBA 4 Design Development.
- Start Procurement process.
- Establish a steering group of renowned leaders within the sector to help to maximise the opportunity that the Maritime Knowledge Hub provides.

To join us on the journey or to simply find out more, please contact the team.

wirralwaters@peellandp.co.uk

TIMELINE

Planning – Granted March 2023 Headlease & SIF agreed – Dec 2023 On Site – Summer 2024 Practical Completion – End 2025 Occupation – Early 2026

PARTNERS











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