

## A statement from the offshore wind ports

June 2017



# A statement from the offshore wind ports

June 2017



windeurope.org

# INTRODUCTION

It is an exciting time to be in offshore wind energy. The industry is maturing, and costs are coming down. In a short space of time, over 3,600 turbines are now installed in European waters, representing 12.6 GW of installed capacity, enough to power 13 million homes. By 2020, this number is expected to reach 24.6 GW.



#### Installed capacity of offshore wind 2010-2021 in the major markets

**FIGURE 1** 

Source: WindEurope

As part of this energy transformation, ports are growing their businesses to support offshore wind energy in increasingly sophisticated ways as contributors to cost reduction and efficiency. When choosing a port to host offshore activities, the old adage of 'location, location, location' may still hold some weight, but the ability to provide adequate infrastructure, as well as superior services, is what is creating value across the entire value chain of offshore wind.

Ports play a unique role in cost reduction and efficiency in offshore wind projects. In an industry that is growing rapidly in volume of projects and technology continuously adapt dimensions, ports their infrastructure to cater for ever larger components, bigger vessels and increased number of activities. Their offer may span over the entire life-cycle of assets, from installation to operation and maintenance (O&M) and decommissioning. Moreover, ports are becoming the focal point in local and regional development by offering testing facilities, training centres and hosting warehouses, offices and operation centres for manufacturers, developers and the supply chain. Therefore, ports are the natural centre of industrial activity and development, bringing together knowledge, labour and capital to offshore wind energy.

Selecting a port for upcoming projects and as a base for wider industrial and business activities should take

"We are very enthusiastic about joining a Port Community to share experiences and thus help us improve our infrastructure and deliver on time an installation hub that meets the developers' needs."

> Michel PUYRAZAT CEO Atlantic Port La Rochelle

priority for the entire offshore wind industry. Early involvement of ports in the planning phase of projects guarantees that industry would profit from the best value that ports can bring, making the ports strategic partners in delivering increased value to customers, governments and society in general.

This document serves to start the discussion on **'What does it take to be an offshore wind port?'** with messages to industry and policy makers alike on the challenges and opportunities that existing and upcoming offshore wind ports have over the coming years. It aims to be a first step **to improve the two-way communication between ports and industry and demonstrate the value of ports towards cost reduction.** 

"We look forward to participating in the Ports Platform by working together and sharing information that will contribute to efficiency, further enhancing the economic growth of the renewable energy sector."

Mark Jones MBE Director of Regeneration Hull City Council



Photo: Siemens

### 2. DEVELOPERS AND PORTS

Ports are the transfer location of choice. The focus is on the marshalling function and usually aimed at sea. Increasingly, testing facilities are offered on site and ports are serving as centres for O&M operations.

Acting as a gathering point for equipment and personnel, port operators and their wind customers have benefitted so far from well planned investments to ensure timely delivery of projects to budget.

However, a developer might contact a port for a project a few months prior to a project tender or before work is due to start, leading to challenges to strategic investment planning. Without guidance from industry and sufficient planning timelines, ports face the choice of making investments without any guarantees of business.

Furthermore, a developer may stay for the duration of installation only and move on to the next project at a different location. As leasing periods could be short, ports face challenges of potential underutilisation of new investments too. The Ports Platform will enable its members to communicate with developers on the role of ports in strategic investment planning and on how they can contribute to cost reductions across the entire life of the project.

The value that ports bring to the industry is largely measured by their ability to follow industry development. Although infrastructure is inherently rigid, ports need to be flexible on many fronts.

Through the Platform, ports work together to ensure they not only follow industry trends, but also stay ahead of the continuously changing environment.

This means investing in infrastructure that caters for technology that may not yet be commercial. This could range from quay side expansion and enhancement of load bearing capacity through to new land clearance for warehousing.

"The offshore wind industry is developing rapidly and we as the ports have to be ready for the next wave. By working together we will be able to present one combined and coherent solution to our clients which will be a benefit to all of us."

Emmanuël Timmermans Business Development Manager Port of Oostende, REBO

Photo: © Port of Oostende



"Parallel to the energy transition, ports are in a transition too. Focus is moving towards added value as we have done on volume cargo in logistics. We see offshore wind and other sustainable energy as new industry clusters and as an excellent fit with key strength of ports. We want to have dialogue with the industry to optimise both offshore wind and ports."

Dorothy Winters Business Development Port of Amsterdam The Ports Platform aims at offering a forum for exchanging information on the development of these technical requirements. As practices evolve, multi-port strategies will mean that cooperation between ports will be stronger than ever.

Also, offshore wind ports offer developers and owners services that cater to their business such as handling increased CTV traffic and prioritised access for installation vessels. The platform will identify actions of common interest such as the standardisation of technical documentation and procedures of some of these activities.

#### **B POLICY FOR OFFSHORE WIND PORTS**

Identified as a high-growth industry, as offshore wind industrialises it will contribute up to 8% of the global ocean economy by 2030<sup>1</sup>. Through providing visibility and a growth pathway, national energy policy is a huge driver of this growth, but policy surrounding ports development is often locked away at the regional level.

The Ports Platform provides a pathway to bridge the gap between EU and national policy and regional policy to identify regulation that unlocks both green and blue growth.

Above all, offshore wind ports advocate for clear, ambitious, predictable and stable regulatory frameworks. Together, they seek commitment from governments on a visible steady pipeline of projects.

With only one country (Germany) with a legally binding target to 2030 for offshore wind energy deployment, ports face the same uncertainty as other capital intensive sectors over future investments.

Ambitious policies could exploit the potential that ports have to contribute further to the economic revitalisation of coastal regions by expanding their facilities and operations, and with this creating jobs, skills and attracting further capital.

"The port platform enables ports to address common issues in order to optimise our offshore wind business. Subjects like custom registration for crew transfer vessels (CTV) and harmonising procedures between countries are discussed which could improve port performance in the value chain."

Erik Bertholet Business manager offshore wind Port of Eemshaven / Groningen Seaports

1. OECD (2016). The Ocean Economy in 2030.

"Clear ambitions and stable, predictable policy making are essential for all ports to maintain their vital role in the development of cost driven and price effective offshore wind energy."

Katja Naber Account Manager Port of Den Helder By engaging with policy makers, ports aim at informing on the challenges they face and communicating their needs for streamlining and standardising regulations related to their activities in offshore wind.

The platform is already engaged in the North Seas declaration for Energy Cooperation to identify regulatory inconsistencies for offshore wind business as it moves from the EEZ and territorial waters.

The platform plans to regularly discuss significant issues for ports and industry, including: tackling different requirements for crew transfers between countries; regulation and standards for transport to and from the harbour; and transportation of components between partner ports.

Furthermore, through the platform, ports can exchange best practices to ensure that the high training and safety standards that exist can be taken to all corners of the offshore wind market.



#### **4**. PORT USERS AND THE SUPPLY CHAIN

Ports are industrial areas that can host a multitude of activities to serve the entire supply chain of offshore wind. From training centres and warehouses to even hosting renewable energy generation and electrical storage. Ports are also ideally located for testing facilities of large components that otherwise would need to be transported inland.

New and existing businesses in offshore wind alike are constantly adapting to changing practices and technology in offshore wind. As turbines and vessels are getting larger, new logistical challenges are being presented.

Knowledge and experience from other industries is needed. The challenge is to keep up with this new knowledge and to translate it into offshore wind. For example, Just-In-Time logistical models and RORO concepts are being introduced into offshore wind alongside cutting edge quantitative planning models. The Ports Platform offers regular interactions so that up-to-date knowledge can be shared and distributed back out to the supply chain. Ports meet at national and international events where they interact with supply chain stakeholders regularly.

"Ports and industry will benefit from sharing best practice, working together to standardize rules and procedures and to keep building and continue to build on the knowledge and experience accumulated in the value chain."

Jesper Bank Chief Commercial Officer Port of Esbjerg



#### **5**. PORTS INNOVATION AND BLUE GROWTH

As a crossroads of virtual and physical flows, ports are natural breeding grounds for innovation. They inspire collective innovation in the supply chain, and provide incomparable insights into the offshore wind industry. Whether enforced or inspired by optimisation, innovation is at the heart of ports' activities.

Ports' contribution to blue growth comprises not only physical infrastructure, but also new economic activities of the digital era. Big Data, automation and digitalisation are permeating at all sectors, ports included.

With the increase in scale and optimisation in logistics, greater requirements in data management to support customers with extensive information exchanges are needed. Ports are the gateway to physically and digitally connecting customers and authorities across the offshore wind energy industry.

Finally, responsible and sustainable innovation make ports excellent study cases of blue and green growth.

By building facilities in harmony with nature and protecting its surroundings, ports create a positive ecological output next to economic output.

The Ports Platform offers opportunities for creating digital tools to facilitate knowledge transfer and discoverability of the services of each port and its users.

"In order to optimize the logistic processes in the offshore wind industry, there is a permanent need for collecting data, related to the working of the sea and the seabed. Can the ports play a significant role as a provider of marine data in order to stimulate innovation and blue growth?"

Wim Stubbe Business Development Manager Port of Oostende



Wind OFFSHORE EUROPE



WindEurope's Offshore Wind Ports Platform is a new forum that allows ports with active operations and interest in offshore wind to come together to share best practice and engage with industry and policy makers with one voice. Ports share knowledge and align communication priorities through regular meetings and networking events which provide discoverability, visibility and branding opportunities for their business.

energy port

Interested in joining the conversation? Contact membership@windeurope.org or visit windeurope.org/ports

Cover photo: © Port of Oostende

WindEurope is the voice of the wind industry, actively promoting wind power in Europe and worldwide. It has over 450 members with headquarters in more than 40 countries, including the leading wind turbine manufacturers, component suppliers, research institutes, national wind energy associations, developers, contractors, electricity providers, financial institutions, insurance companies and consultants. This combined strength makes WindEurope Europe's largest and most powerful wind energy network.



PRINTED CLIMATE NEUTRALLY certificate number:53520-1705-1001 www.artoos.be





\_\_\_\_\_

Rue d'Arlon 80, 1040 Brussels, Belgium T +32 2 213 1811 · F +32 2 213 1890 windeurope.org