PORTS AS KEY PLAYERS IN THE OFFSHORE WIND SUPPLY CHAIN

The operation and maintenance of offshore wind farms are run out of ports.

All offshore wind turbines and other equipment get transported to offshore wind farms via ports.

Ports will be the assembly point for floating offshore turbines.

Ports will play a key role in converting offshore wind power into renewable hydrogen.

THE EXPANSION OF OFFSHORE WIND IN EUROPE TO 2030

2023
- 6,340 turbines
- 34 GW

2030
- 13,000 turbines
- 128 GW

WHAT THIS MEANS FOR PORTS

Average annual installations
- 13 GW
- 1,000 WT/year

Operation & Maintenance
- 128 GW
- 13,000 turbines

Floating turbine assembly
- 4 GW
- 300 turbines

Decommissioning
- 700 MW
- 300 turbines

Renewable hydrogen
- 20+ projects

THE ADVANTAGES OF LOCATING ELECTROLYSERS IN PORTS:
- Proximity to offshore wind farms and landing points;
- Presence of local and regional industrial clusters;
- Multiple opportunities for distribution and export; and
- Helps decarbonise other sectors.

INVESTMENT REQUIREMENTS

WITHOUT PROACTIVE INVESTMENTS IN PORTS, THE OFFSHORE WIND SECTOR WILL NOT BE ABLE TO MEET THE NATIONAL CLIMATE AND ENERGY TARGETS.

Money should go to port land expansion, reinforcing heavy-loading quaysides and deep-sea harbours, and carrying out other civil works.

€8.5bn investment
To upgrade or build at least 50 port facilities before 2030

5 years
To pay back the investments

Cost reduction
These investments will make offshore wind cheaper and bring massive savings for electricity consumers.

A platform for offshore wind

The WindEurope Ports Platform brings together ports with active operations and interests in offshore wind to share best practices and engage with industry and policy-makers.

 Interested in joining the conversation?

Contact: Diana.Barrios@windeurope.org or visit windeurope.org/ports

The map represents the status as of March 2024. The size of the wind farms is relative to capacity. Access the latest Offshore Wind Farms database at WindEurope’s Intelligence Platform: windeurope.org/wip