

Harwich Offshore

Centre for UK
offshore
renewables

One of the largest offshore
wind opportunities in the
North Sea.



Harwich's Offshore Wind Experience

Harwich is one of the UK's largest and most experienced port complexes in the offshore renewables industry with 260 turbines installed and many operational difficulties resolved.

The ports, Harwich International Port and Harwich Nayanard, have been involved in lay-down, installation, operations and maintenance for Rounds One and Two and have hosted key operators such as A2Sea, DONG, Aasleff/Bilfinger Berger JV, Fluor, MPI, SeaJacks and Siemens.

"We lead the world in offshore wind. The UK already generates more power from offshore wind than the rest of Europe combined. We also have an exceptionally strong pipeline of projects going out to 2020 and beyond."

Offshore wind will help us improve our energy security, cut our emissions, and create new industries and employment around the country"

Department of Energy and Climate Change, 2012.

The Harwich Offer

Harwich is located in the centre of Europe's Offshore Wind activity, accessible to the Southern North Sea Gas projects.

The ports have sheltered deep water with 2km of quays for Jack-up barges and work boats and over 0.8 km² (200 acres) of land available.

With an intermodal rail head and a London train time of 1hr 25m Harwich has excellent connectivity by rail as well as air, road and sea.

The Harwich Opportunity

Harwich has the proven ability to serve the UK's Round 2 extensions, Round 3 and European offshore facilities from a long established deep water base.

The ports have the experience to provide the highest quality services to the World's best operators in offshore wind and decommissioning as well as the land and development opportunities for manufacturing, installation, logistics and servicing.

Bottom left image - Quayside, Harwich International Port

Cover Image - London Array foundation installation from Harwich





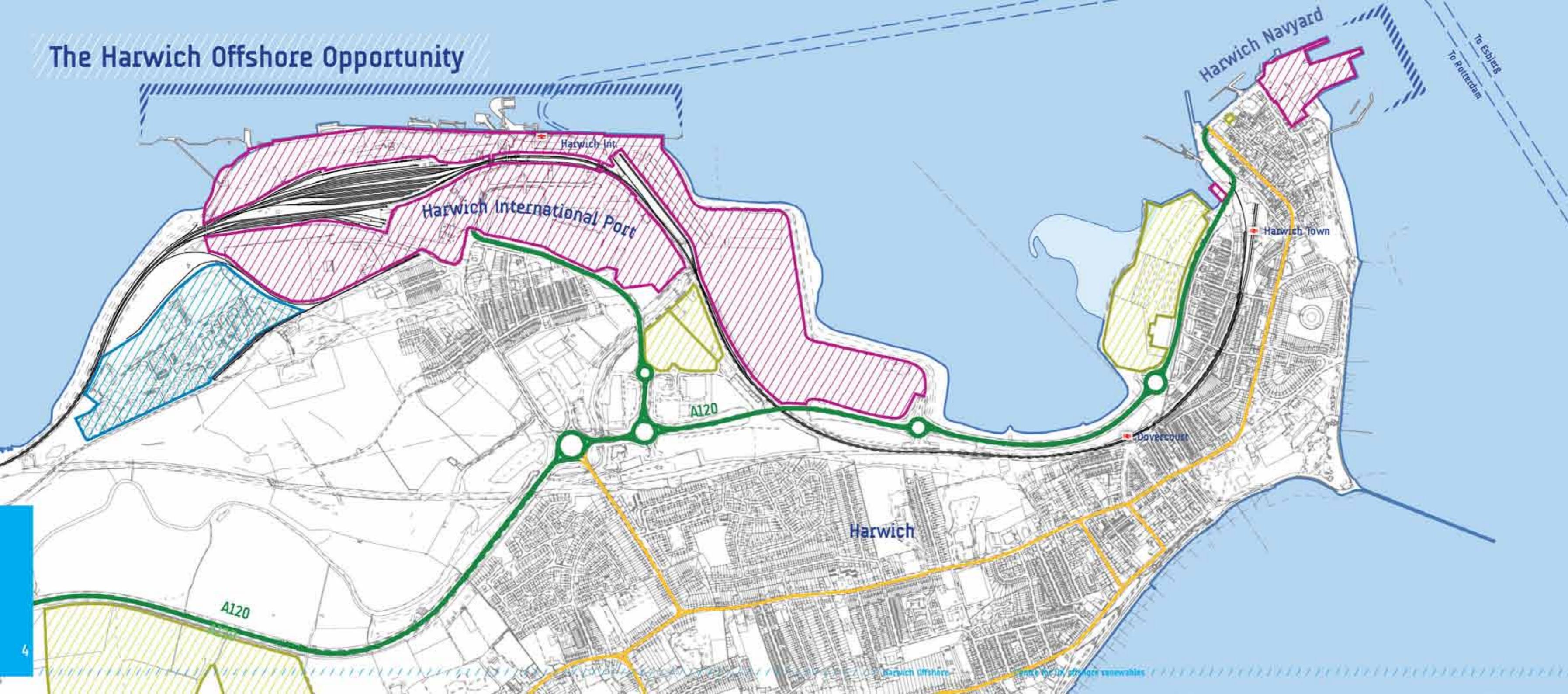
Main image - Barge transfer, Harwich

Top left image - Turbine installation

Top right image - Cable spooling



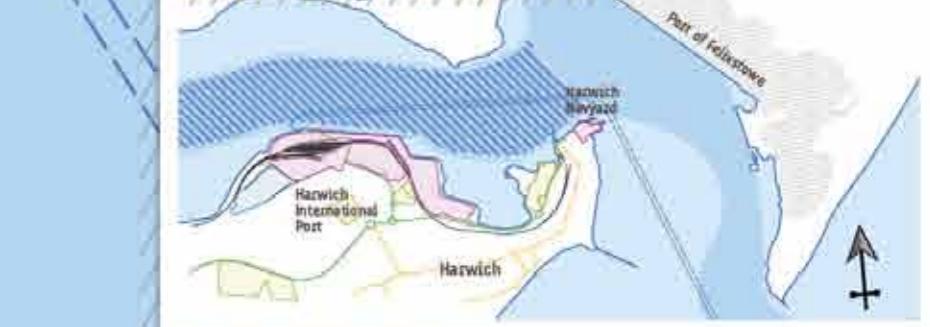
The Harwich Offshore Opportunity



Map showing the opportunities offered by Harwich to operators in the Offshore Renewables Industry ...

- Extensive port facilities
- Commercial land
- Sheltered waters
- Close proximity to major wind farms.

Naturally Sheltered



Harwich in Europe



Key

- Port Facilities
- Oil Refinery
- Commercial Land
- Quays

The Harwich Offshore Opportunity

Port Facilities

Harwich offers more land with direct access to deep water and rail than any similar port in the Southern North Sea. The ports have operational areas of 115 hectares including over 35 hectares of available land with direct access to 2 km of deep water quays for laydown, assembly, fabrication and barge transfers.

With over 2 km of quayside, 7.5 to 9.5m minimum depth alongside, two Ro-Ro linkspans, dedicated areas for storage and land immediately available for operations, Harwich is the ideal set up for offshore operators, developers and manufacturers.

- Quays: 12 Berths totalling 2 km
- Minimum depth: 7.5 – 9.5m
- 2 quay cranes
- Access 24/7, no lock or air restrictions.

Should the market require, there are opportunities available for further extension to both the quayside and storage areas. Harwich truly has a unique offer.



Commercial Land

Harwich has over 45 hectares of land well located outside the ports available for commercial uses supporting the offshore renewables sector. Land and buildings are available adjacent to the ports as well as on main road sites around Harwich.

Specific sites close to the ports include ...

- Harwich Valley a 6 hectare proposal with commercial, retail, leisure, hotel and public open space planned
- Stanton Europark, adjacent to Harwich International Port, a 3.3 hectare site suitable for a logistics or distribution centre, warehousing or industrial units
- Europa Way, a 5 hectare Estate with distribution and general industrial use.

Sites are available for immediate development for manufacturing, servicing and open storage facilities whilst existing buildings provide superb office, industrial and warehousing units.



Bottom left image -
Barge transfer for
Greater Gabbard lay-
down., Harwich.

Bottom right image -
Blade transfer, Harwich.

Infrastructure



Harwich has some of the finest and most effective infrastructure of any port on the Southern North Sea.

Quays

2 km of sheltered deep water quays for Jack-up, Workboat, Ro-Ro, Bulk, Passenger and Tanker berths, Quay cranes with direct access to laydown space and comprehensive shoreside facilities.

Ferry

Harwich has regular direct ferry services to mainland Europe.

Road

The A120 trunk road connects Harwich with the key routes of the A12 and A14 and the UK motorway network.

Rail

Harwich is served by three rail stations. The International station at the port has an intermodal rail head with capability for containers and unitised freight. All stations in Harwich have direct train services to London.

Air

Air services are close by; London Stansted Airport less than an hour away via the A120 with London's City, Luton, Heathrow and Gatwick airports within two hours by road. Harwich is served by a helicopter pad six miles away.

Harwich has an **Oil Terminal** with a tanker quay and is also home to the Harwich Haven Pilot services.

Main image - turbine blade laydown, Harwich International Port.



Harwich

Harwich is at the centre of the Haven Gateway cluster of sheltered ports. The ports provide unrestricted access, servicing the offshore industry with facilities for all vessels from cable layers and jack-up installation vessels to transfer barges and wind farm maintenance boats.

The Haven Gateway ports include ...

- Hutchison UK's Harwich International Port
- Hutchison UK's Felixstowe Port - the UK's largest container port
- Mann Lines' Harwich Navyard
- Associated British Ports' Port of Ipswich
- Brightlingsea Port's Oliver's Wharf

Harwich is also home to ...

- Petrochem Carless oil refinery
- Harwich Haven Authority
- Trinity House



Main image - Greater Gabbard laydown at Harwich international Port

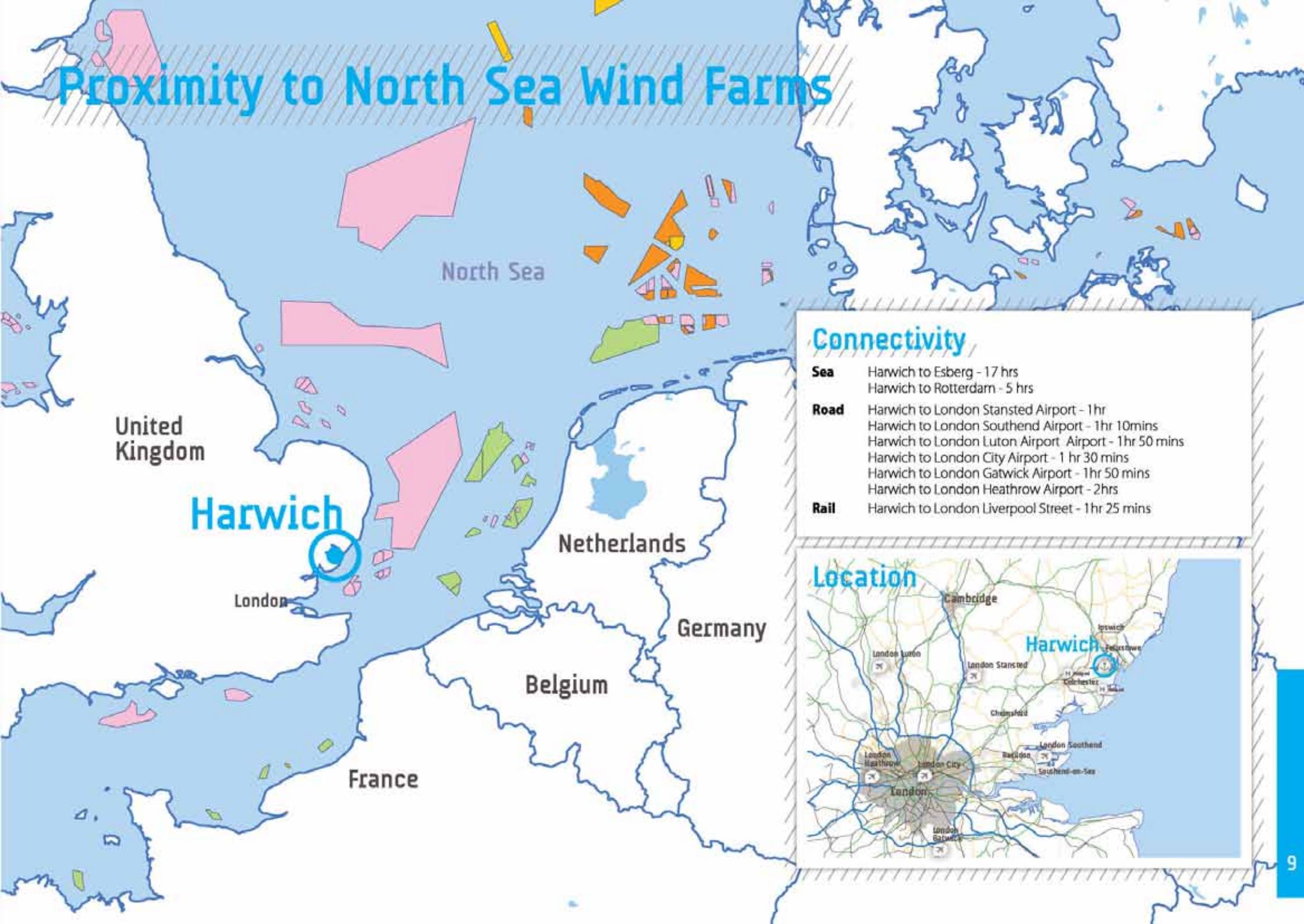


Partnership and committed local leadership

Harwich has a strong private/public sector partnership which operates under the banner of the Haven Gateway Partnership. The Partnership includes Hutchison Ports UK and BT alongside the Chambers of Commerce, the University of Essex, Tendring District Council and Essex County Council.

Active leadership is provided at the highest level in both political and business organisations representing Harwich locally, nationally and internationally, ensuring investment is encouraged and supported at all levels of Government as well as within the extensive supply chain.

Proximity to North Sea Wind Farms



Connectivity

Sea	Harwich to Esberg - 17 hrs Harwich to Rotterdam - 5 hrs
Road	Harwich to London Stansted Airport - 1 hr Harwich to London Southend Airport - 1hr 10mins Harwich to London Luton Airport - 1hr 50 mins Harwich to London City Airport - 1 hr 30 mins Harwich to London Gatwick Airport - 1hr 50 mins Harwich to London Heathrow Airport - 2 hrs
Rail	Harwich to London Liverpool Street - 1hr 25 mins

Location



Ports

Hutchison Ports (UK)'s Harwich International Port

From its strategic position on the East Anglian coast, one of the country's finest naturally protected harbours, the port has long been renowned for its fast, lock-free access to the North Sea and beyond.

Harwich International Port has become one of the cornerstones of UK offshore wind development in the Southern North Sea, having acted as installation base for over 260 turbines to date – more than any other UK North Sea port.

These projects have included Gunfleet Sands, Greater Gabbard and London Array. Within these projects Harwich International Port has played host to a wide range of jack-ups, cabling vessels, barges and accommodation vessels.



Mann Lines' Harwich Navyard

A general cargo port with substantial experience in wind farm support, sub contracting, cable laydown and vessel chartering.

The Navyard has had direct involvement in the Gunfleet Sands, Greater Gabbard, Galloper and London Array wind farms, servicing work boats from five berths and providing bunkering, operation offices and crew change facilities.

Navyard has a weekly Ro-Ro and general cargo service to Germany and the Baltic, operating its own vessels and road transport fleet with on-site warehousing and freight services. The port has the experience and capability to transport specialist cargoes and has handled numerous parts for wind turbines including blades.

Bottom left image - Nacelle transfer, Harwich
Bottom right image - Harwich Navyard
Top right image - Work boat from Brightlingsea



Supply chain and skills

Local Supply Chain

Harwich has an impressive energy sector supply chain of over 1200 businesses including vessel chartering, engineering, cabling and marine services.

The supply chain has more than 40 years experience in the energy sector servicing nuclear, oil, coal and renewable installations.

This experience has resulted in a concentrated network of highly experienced businesses that have successfully diversified into the offshore wind industry supporting the development, construction and operations of Round One and Two wind farms in the Southern North Sea.

Red7Marine is a leading provider of offshore subsea engineering and marine construction services headquartered near Harwich. With experience ranging from design & fabrication to O&M Red7Marine supplies and operates jack-up barges with other marine plant for hire.

CWind is a highly experienced Colchester based provider of services to the offshore wind industry including vessel charter, project solutions, turbine technicians and training. CWind has worked on 18 wind farms all around the UK and regularly has over 200 technicians offshore, working for a growing list of international clients.

Prysmian PowerLink Services have 91 plants and 17 research and development centres globally, including a UK base in Chelmsford. They are a leading player in the high-technology cabling industry and manufacture and install sub-sea cables for the offshore renewables industry.

Skills

Harwich has a talent pool of 750,000 within a short commute and nearly 250,000 people with degree level qualifications or higher in the immediate area. The town is served by four higher education institutions based in Colchester and Ipswich, they cater for 28,000 students and offer courses including electrotechnical engineering, industrial applications and ICT.

Essex has extensive skills development programmes to train talent for deployment in the offshore wind sector.

The Harwich Energy Skills Centre is a training centre with an engineering focus located in Harwich International Port and designed to meet the needs of employers in the area. The Centre provides a range of further education and apprenticeship programs including **Energising Harwich** – the 'Passport to Work' which provides employability skills, work experience opportunities and business accreditations for 30 apprenticeships and 60 work placements within Harwich.

Apprenticeships – there are a range of apprenticeship programmes in operation in Essex, Suffolk and Norfolk; the Coastal Communities Programme is providing support for 200 energy-related apprenticeships for young people in core STEM subjects which will help to provide relevant skills to the wind energy sector. **The Harwich Mayflower Project** trains young people in marine engineering apprenticeships and **The Green Energy Training Centre** provides both apprenticeship programmes and training.

There are around 21,000 16-18 year olds enrolled in Further Education in Essex and of these over half are in school sixth forms and 5,000 are participating in apprenticeships.

Top right image - Blade & tower delivery to Bottom right -
Turbine maintenance crew

Back cover image - Blades & towers load-out, Harwich



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offshore
renewables

Harwich is one of the UK's best located and most experienced wind ports.

Contact us for the commercial opportunities accessible from Harwich.



Find out more . . .
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www.harwicloffshore.co.uk



Supported by . . .



Harwich
International Port



PRYSMIAN



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Cwind



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