

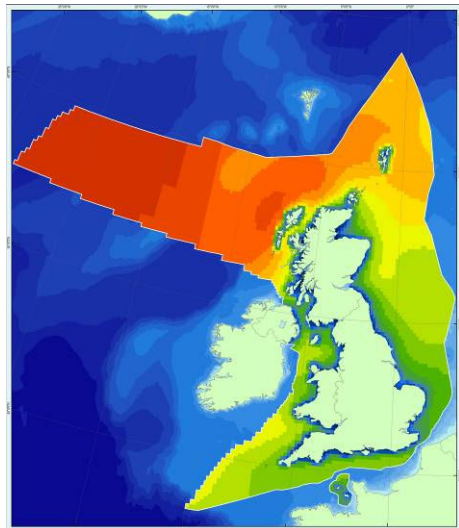
# Offshore Wind Services

## About

ABP Marine Environmental Research Ltd (ABPmer) is a leading provider of specialist expertise to the offshore wind sector. With a strong track record of marine and environmental support to Round 1, 2 and 3 projects, ABPmer effectively combines practical experience with a proven understanding of the marine environment to assist offshore wind developers in reaching their objectives.

Typical contributions have included comprehensive coastal process studies, specification and supervision of surveys as well as metocean analysis and O&M support.

Developers also benefit from ABPmer's pursuit of innovation and research initiatives, typified by its leading role in strategic projects for Government and regulators, including the Marine Renewable Atlas and the Review of Offshore Sediment Processes. Active involvement in national science forums and contributions to ISO standards for marine renewable developments, further demonstrate ABPmer's recognised position.



## Site Selection Constraints Mapping

### Initial Site Characterisation

### Gap Analysis for Survey Specification

At the initial stages of project development intelligent resource assessment is a critical phase. Identifying suitable development sites requires more than a simple application of spatial constraints. The application of specialist knowledge, tools and expertise by ABPmer's Data Team allows analysis of site potential in three dimensions.

Coupled with our ability to rapidly draw on existing data and information to develop an on site characterisation report and with inclusion of a gap analysis to guide further data collection requirements, ABPmer's site analysis will ensure successful completion of the development cycle

## Project Development

### Consent support

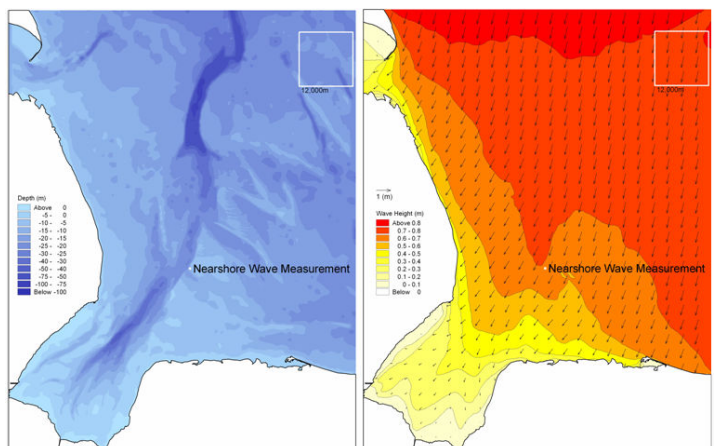
### Surveys specification, supervision and audit

### Marine and coastal process studies

### Environmental impact assessment

### GIS & data management

During project development a wide range of more detailed data inputs and analyses are undertaken by an integrated multi-disciplinary team within ABPmer to ensure that environmental impacts and obligations are understood and met. Our understanding of the consents process and legislation is greatly complemented by our sound working relationships with the regulatory authorities.



## Further Information

Please phone Bill Cooper, Offshore Wind, ABPmer: 02380 711840



# Offshore Wind Services



## Detail Design

**Extremes analysis**

**Metocean studies**

**Predicting future seabed morphology**

**Operating environment**

At the detail design stage, ABPmer's Modelling and Process Teams determine extremes for engineering parameters and the meteorological constraints on construction, operation and maintenance periods by combining initial resource assessment studies with metocean data for analysis. ABPmer assesses the risk of natural variability across wind farm and predicting future sea bed levels

**Operation**

**Environmental monitoring**

**Operational forecasting**

The operational phase of the development is the longest in duration. Any slight performance variation from the planned norm could have significant long term effects on both the life and cost effectiveness of the development. ABPmer's authoritative marine environment and survey teams provide reliable specification of any required monitoring plans for analysis of the seabed and operational metocean forecasting.

## Decommissioning

### Decommissioning Site Survey

Decommissioning could be considered the least certain aspect of any development due to a complete absence of experience within the marine renewables sector. ABPmer's skilled environment and survey teams can prepare and undertake post-decommissioning monitoring to meet pre-construction consent requirements.



## Offshore Wind Projects:

Aberdeen  
Burbo Bank  
Cromer  
Docking Shoal  
Greater Gabbard  
Gunfleet Sands I & II  
Gwynt Y Môr  
Humber Gateway  
Lincs

London Array  
Lynn & Inner Dowsing  
North Hoyle  
Race Bank  
Rhyl Flats  
Scarweather Sands  
Tees  
Triton Knoll  
Westermost Rough

Work to support these windfarms included:

- Marine and coastal process studies
- Oceanographic and sedimentary process studies
- Metocean and oceanographic conditions for design, operation and construction
- Environmental impact assessments and Environmental Statements
- Oceanographic survey and survey design

## Further Information

Please phone Bill Cooper, Offshore Wind, ABPmer: 02380 711840

