

Environmental Impact Assessment // Teesside Offshore Wind Farm



Entec is one of the UK's largest environmental and engineering consultancies whose aim is to be a seamless provider of high quality, value for money, integrated services which deliver solutions to environmental and engineering issues. These services can take the form of individual specialist studies or form part of a wider environmental appraisal.

The Project

As part of the UK government's initiative to generate 20% of the UK's electricity supply from renewable sources by 2020, EDF Energy (Northern Offshore Wind) Limited, a major generator of electricity in the UK, are proposing to build an offshore wind farm occupying around 10km², approximately 1-1.5km offshore of Redcar.

Entec was engaged to carry out an environmental impact assessment (EIA) for this project, carrying out studies to assess the potential impacts that the construction and operation of the wind farm may have on the following areas:

- »» Socio-economics and social impact assessment
- »» Ecology and nature conservation studies
- »» Landscape and visual impact assessment
- »» Shipping and navigation
- »» Archaeological and cultural heritage studies
- »» Commercial fisheries
- »» Marine ecology

Entec's environmental specialists prepared cost-effective data collection strategies and then interpreted the data to develop appropriate and innovative mitigation; ensuring that the environmental information was effectively communicated to those involved in the decision making processes.

A key part of this data was a range of imagery and mapping which Entec sourced from the emapsite website. An example of this was Land-Form PANORAMA, a 1:50,000 scale digital height dataset covering the whole of Great Britain and available as a digital terrain model (DTM).

The PANORAMA data was used to create a Zone of Visual Influence (ZVI), a 3D visualization of the area around the proposed site which enabled Entec to calculate where the wind farm would be visible from. It was also used to help create a computer generated photomontage, like the one above which shows the view of the wind farm from Seaton Carew near Redcar.



“ We started using emapsite about 2½ years ago and find them very easy to deal with. ”

Toby Lee
Environmental Consultant, Entec

