

Introduction to the supply chain activities in the POWER project

In its supply chain activities, the POWER project is increasing the supply chain knowledge for the offshore wind industry in the North Sea Region. It establishes strong networks between leading offshore wind regions, involving both support organisations and businesses of the sector.

The supply chain workstream combines five regions in four countries: The East of England in the UK; Esbjerg in Denmark; Bremen / Bremerhaven in Germany; Husum / Schleswig-Holstein in Germany and Kop van Noord Holland in the Netherlands. All of these regions have the ambition to become leading players in offshore wind energy in their respective countries.

The partnership combines member based business organisations from the energy field, as well as local authorities and business support agencies. This partnership ensures that a close link with the industry is maintained, and that the needs of the industry are reflected in POWER activities.

A strength of the partnership is the combination of regional expertise in onshore wind energy and in offshore oil and gas industries, which will make exchange of experience and best practise particularly beneficial. Several of the partner regions have already practical experience in the construction of offshore wind farms, with Horns Rev in Denmark and Scroby Sands in the East of England.

Thus the partnership is ideally placed to establish a North Sea wide centre of excellence for the offshore wind energy industry.

POWER Offshore Wind activities and results related to economic issues

At the core of the supply chain activities in the POWER project is the development and enhancement of the offshore supply chain in the North Sea. Regional supply chain studies and a joint North Sea wide study (see overleaf) provide a strong baseline and direction for the further work, including the elaboration of strategies to support the supply chain.

To allow for improvements and innovation in business support for the sector, and to strengthen the co-operation internationally, the project partners exchange experience and best practise, in seminars and through staff exchanges between partner organisations.

As part of the supply chain/economic support work, POWER facilitates business networking opportunities between the partner regions at international conferences and trade fairs, through business forums, giving businesses the opportunity to meet and build cross-North Sea networks. This will help to broaden the offshore wind supply chain beyond regional and national boundaries, and filling gaps in the supply chain by transnational business co-operation.

The project will hold conferences and seminars discussing challenges and solutions to develop the offshore wind supply chain, regionally and North Sea wide. POWER project results are also presented at well-established conferences, such as HusumWind.

In order to strengthen the ambition to create a North Sea wide centre of excellence for the offshore wind industry, joint promotion and publicity material will be produced.

Offshore Wind Energy Supply Chain Studies

The POWER project commissioned regional supply chain studies for the offshore wind industry. Each of the studies covers the whole supply chain, i.e. development, construction and operation, and uses two scenarios - one for the existing supply chain parameters with turbines up to 3.9 MW turbines in shallower waters, the other reflecting future supply chains, with larger turbines in deeper waters. Based on these scenarios, the studies analyse current and future crucial gaps and pinch points in the supply chain.

The studies also include detailed descriptive profiles of all planned and completed offshore wind farms around the regions, a market Compatibility Matrix showing regional capabilities, an estimated value of expenditure and jobs for the supply chain and recommendations for business support and training needs.

Regional studies have been conducted for the East of England (with a focus on Lowestoft and Great Yarmouth), Denmark (covering the whole of the country) and North-Western Germany (in two inter-linked studies with focuses on Schleswig-Holstein and the Bremen / Bremerhaven area), and have been completed in summer 2005. All of them are available from the POWER website.

North Sea wide supply chain study

To combine the regional studies and to get a full North Sea overview of the key challenges and co-operation opportunities in the international Offshore Wind Supply Chain, the POWER project has commissioned a transnational study. It is expected that this study will be available in winter 2005/06.