



C-POWER PROJECT

BELGIUM

A min 216 – max 300 MW windfarm in front of the belgian coast

Power@Sea and its shareholders are holding the majority in the C-Power project, a farshore wind farm on the Thornton Bank, 27 to 30 km in the North Sea. The wind farm will have an installed capacity from min. 216 MW to max. 300 MW. Together with its partners Turbowinds, Interelectra and SIIF Energies, Power@Sea and its shareholders anticipate to receive all permits by the summer of 2004 and the construction of this wind farm is projected to start in 2005.

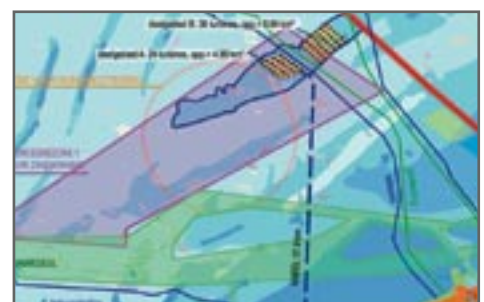
This windfarm consisting of 60 Wind Turbines of at least 3,6 MW on monopile foundations, will produce about 710 GWh/year, sufficient to provide over 200.000 families with green energy. This will result in a reduction of CO₂ emissions equivalent to 450.000 ton/year, which is equal to the CO₂ absorption of a strip of forest of 15km wide along the entire Belgian coastline.

In addition to these ecological benefits, the visual impact of this windfarm is negligible, it is situated in an area which is of little importance for fishing and at large distance of the important navigation routes and birth forage areas.

Apart from providing equity for this project, Power@Sea and its shareholders will carry out all maritime works and Power@Sea will be responsible for the maintenance of the windfarm for the lifecycle of the farm.

By combining the maritime contracting experience of the DEME-group, the financial expertise in environmental projects of ECOTECH FINANCE and the experience of SOCOFE in the field of utility services, Power@Sea can provide almost all required expertise to demonstrate that the production of "green wind energy" is a realistic option in the North Sea.

More information on this project can be found on the website:
<http://www.c-power.be>





UTGRUNDEN WIND FARM SWEDEN



SCOPE OF WORK

- **INSTALLATION OF LARGE DIAMETER DRIVEN PILES**
- **SPECIALIST GROUTING**
- **OFFSHORE TRANSPORT**
- **ERECTION OF OFFSHORE WIND TURBINES**

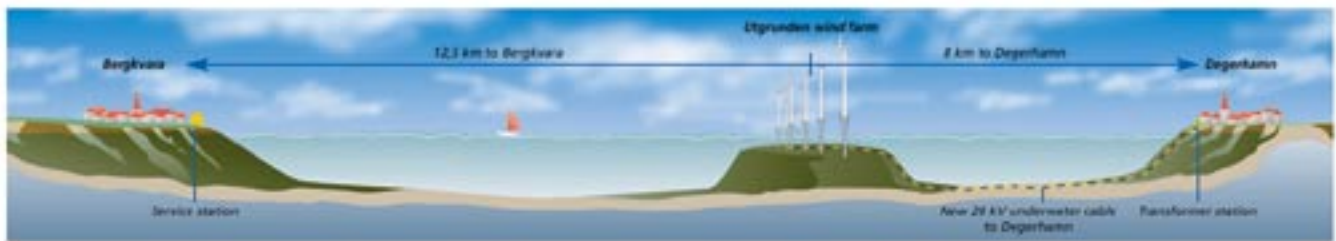
Hydro Soil Services, one of the subsidiaries of our main shareholder DEME completed the first (supra mega watt turbine) wind park offshore in the Baltic as main contractor for Enron Wind. This project included the installation of the mono pile foundation, the transport and the erection of the wind turbines for the Utgrunden offshore wind farm in Sweden.

Hydro Soil Services was awarded the contract to transport and install seven 1.5 MW turbines.

The contract involved the installation of the mono pile foundation together with the erection of the tower, nacelle and rotors. Hydro Soil Services carried out detailed assessment of the lifting requirements and decided to deploy two self-elevating jack up platforms of 600 tonne and 200 tonne deck capacity to undertake the work. This proved to be critical in reducing delays due to poor weather to a minimum and enabled the erection to be undertaken in the most efficient and cost effective manner.



DESCRIPTION OF THE PROJECT



The first stage of the project involved the transport and installation of seven steel mono piles. Each pile weighed 140 tonnes, was 34 m long and 3.0 m in diameter. The piles were transported from the fabrication site at Frederikshavn by sea going barge and then lifted into position and driven using one of the jack up platforms. Each pile was driven 19 m into the seabed by means of a hydraulic hammer of 500 kNm deployed from the jack up.

On completion of the foundations, each pile cap was fitted with a prefabricated transition piece incorporating a working platform and cantilevered transformer bed. The transition pieces were attached to the pile caps by means of a specially designed grouted sleeve connection, 5 m above sea level.

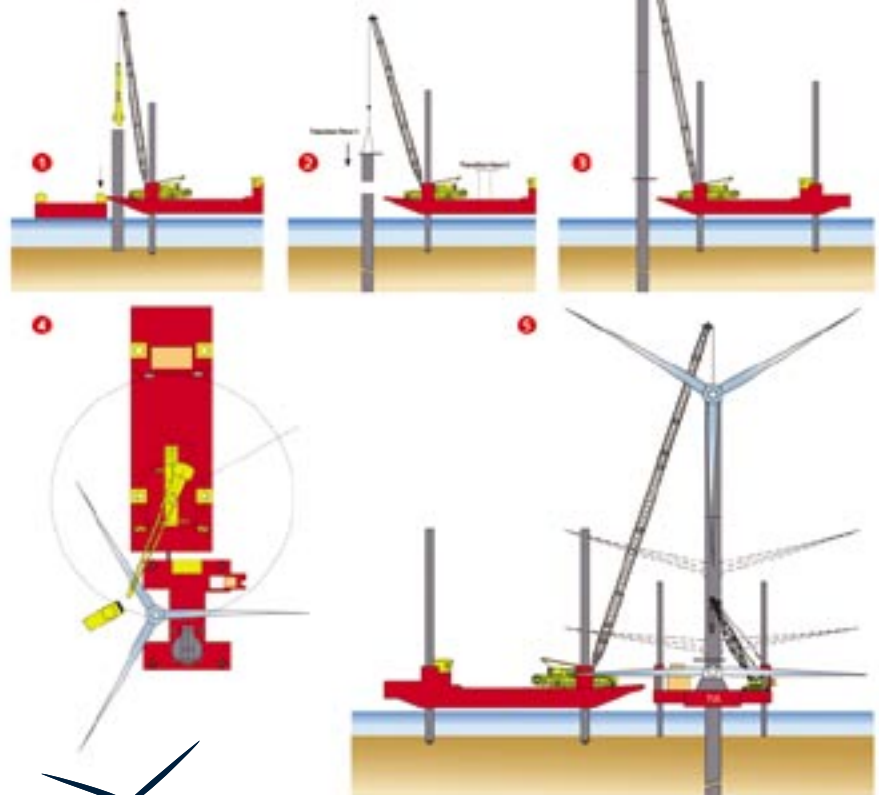
The third phase of the operation involved the erection of the towers, nacelles and rotors. Towers and nacelles were transported by barge from the quayside at Bergkvara and erected with the jack up platform which installed the foundations.

The prefabricated 70.5 m diameter rotors were collected at Bergkvara by the smaller jack up and then lifted into position with the two



jack up platforms working and lifting in Tandem. The final assembly stands some 65 m high to the nacelle hub.

The project was awarded end of July 2000 and work commenced in early September 2000. Transportation and installation of the foundations was completed by the end of September with the final erection of the towers and rotors completed by the end of October 2000





SPECIALISED VESSELS

FOR THE CONSTRUCTION OF OFF-SHORE WIND FARMS



Pile drilling at Lundy Island (Wales) executed by the Zeebouwer, a jack-up owned by the DEME group. This jack-up with a leg length of 42 meters has a payload of 600 tons.

As one of the industrial world leaders in the dredging industry, the DEME group has a 2.400 strong workforce and operates a modern fleet of about 75 vessels.

Apart from the typical dredging fleet, DEME has invested large amounts in specialised own vessels which are able to undertake all marine contracting work related to off-shore wind farms.

Power@sea has, through its major shareholder DEME, full access to this impressive fleet which includes amongst others;

- trailing, cutter and other types of dredgers for foundation work and cable laying
- directional drilling rigs for cable landing
- self-elevating platforms to drive mono piles into the seabed with maximum precision and for the installation of turbines
- heavy lifting vessels for caisson foundations and assembly work
- stone dumping vessels for erosion protection

Currently, a large new self-elevating platform with a pay-load of 1.000 tonnes is under construction. This new platform will be one of the most flexible vessels to carry out this kind of specific maritime contracting work.



Picture 1



Picture 2

Picture 1

The Rambiz is an ocean going heavy lifting catamaran with 2 masts of 82 meters and a maximum lifting capacity of 4.000 tons.

Picture 2

The Pompei is a side stone dumping vessel well suited for erosion protection at sea.





ON-SHORE WIND TURBINE EXPERTISE BELGIUM

In June 2001, the Flemish Government launched a tender for the construction of a wind farm on the embankment adjoining the port of Zeebrugge.

The public electricity producer SPE (in which our shareholder SOCOFE holds a major stake) submitted a proposal together with Vestas, the Danish constructor of wind turbines. The consortium SPE – Vestas was selected as the most reliable consortium out of six offers and was awarded with a concession by the Flemish Government to construct a windfarm. Currently, the preparations are at an advanced stage and construction will start soon.



Wind turbine park Zeebrugge

Next to this large concession, the shareholders of Power@sea have several smaller on-shore projects in operation or in preparation including projects in Kallo, Stembert, Assesse, Vinalmont amongst others.



The first E in DEMA stands for Environmental. To emphasise its genuine commitment to a healthy environment, energy requirements of this DEMA site is provided by a 600 kW wind turbine.

