



Earth's physical resources: renewable energy.

Wind power in Wales

Narrator:

Other wind power developers have been constructing larger wind farms in other parts of the UK. This one is in Wales.

The planning issues here were much the same as at Kirkheaton, and the local communities had similar concerns.

Inevitably, some people objected to a wind farm in their own back yard.

But now the turbines are turning, the majority of local people are positive about the project.

Although most of the components were manufactured abroad, wind farm construction involved local firms and brought economic benefits to the area.

But many environmental groups believe that the UK Government hasn't done enough to promote wind power.

Roger Higman:

Britain has the best wind resource of any country in Europe but ironically we lag behind Denmark Germany even Spain in the development of that resource...

Narrator:

In Britain, planning objections have made it difficult to build wind farms in many parts of the countryside. One solution is to build wind farms offshore.

The 300 kilowatt turbines on the breakwater at Blyth Harbour were Britain's first semi-offshore windfarm.

David Stills:

When we built Blyth Harbour in '92, it was one of the, you know the third or fourth projects built in the UK. So what we had is a lot of unknowns. Local people didn't know what they were going to look like, local authorities were probably very confused about how to go through the planning laws, and we had the statutory bodies, English Nature, plus the non statutory bodies like RSPB, you know wanting to know what the effects were going to be of the wind farm on the environment.

There was a headline in the local paper which was basically that the scenery was going to be devastated by the turbines. It didn't happen, people have accepted them and they're very proud of the wind turbines in Blyth now.

Narrator:

The company has also constructed Britain's first offshore wind farm, two 2 megawatt turbines manufactured by the Danish company Vestas, a kilometre out into the North Sea.

AMEC Border Wind worked in partnership with Powergen Renewables, Shell Renewables and the Dutch green energy company Nuon,

Huub Den Rooijen:

Border Wind had made all the right moves as far as the consents and as far as relations with the local people were concerned so we thought they had done an excellent job and we were very keen to combine that with

Shell's engineering expertise in creating a project which would be the first in the UK, and which would hopefully serve as a stepping stone into clean energy for the future.

Narrator:

The Blyth offshore wind farm is now up and running.

Vestas also supplied the turbines for the earlier Tuno Knøb windfarm, located off the east coast of Denmark.

The ten turbines generate a total of five megawatts of electrical power.

But one of the most interesting projects to date is the Middelgrunden windfarm, just outside the city of Copenhagen.

This consists of 20 wind turbines, each of 2 megawatts, Together, they supply 3 percent of Copenhagen's electricity.

Denmark is building more offshore wind farms, as are several other European countries.

Huub Den Rooijen:

We hope to see I would say before the end of the decade hundreds and hundreds of megawatts of generating assets - offshore wind assets within Shells' portfolio, and if that would not be the case I would be severely disappointed.

Narrator:

With Blyth offshore, Britain is beginning to tap into its rich resources of wind.

John Doddrell:

We have 18 proposals for wind farms being taken forward now. They'll build on the existing wind farm, offshore wind farm at Blyth, er and we're making £74 million of Government funding available to help those projects er to come to fruition.

Erik Lysen:

We see already, machine as large as say 100, 120 metres diameter, 5 megawatts er in in capacity to be to used on offshore locations, and those are the machines required to tap our enormous off shore potential which we have in the North Sea, but also around the world.