FOUNDOCEAN

The History of the Windfarm

1887

The first ever windmill for electricity production was designed

It was built by Professor James Blyth, a professor at Anderson's College, Glasgow (now the University of Strathclyde). He trialled three designs, the most successful of which powered his home for 25 years.

Scotland has long been the home of innovation in the energy sector and FoundOcean is proud to play our part in that tradition!

1980

The first windfarm was built in 1980 on Crotched Mountain, New Hampshire

The US Windpower farm ran for two years and was made up of 20 wind turbines, each around 18m tall.

The windfarm was built as a pilot project, but the site had an inconsistent amount of wind, so not enough energy could be produced to make the project a commercial success.

1991

An 11-turbine site off the coast of Denmark becomes the first offshore windfarm

Vindeby, commissioned by Ørsted produced 5MW of energy per year. That's enough to power 2,200 Danish households.

Over the next 10 years, there were more pilot projects, but with a focus on technical feasibility more than cost-effectiveness.

2003

One of the UK's first offshore windfarm, North Hoyle, was built off the Welsh Coast

The total construction cost of North Hoyle was £80million. The site is made up of 30 turbines, each 110m tall with an 80m rotor diameter. It produces enough electricity to power approximately 40,000 homes per year.

2019

The installation of Beatrice Offshore Wind Farm was completed

Beatrice is a project FoundOcean was delighted to be involved in. It supplies enough clean energy to power 450,000 households and the cost of the project was £2.6billion.

That means that it only cost three times as much as North Hoyle, yet is powering TEN TIMES the number of homes. Impressive.

FUTURE

Offshore wind turbines are getting bigger! One single MySE turbine can power over 20,000 homes

Hot on the heels of the Haliade-X – with its 107 metre blades and a 12-14 MW capacity – comes China's MingYang Smart Technology MySE 16.0-242 with its 118-metre blades (sweeping an area the equivalent in size to six football pitches, 46,000 square metres) and 16MW capacity.

Award winning structural grouting services for global offshore energy construction