

Hywind Scotland is the world's first commercial- scale floating offshore wind farm. Located 25km off the coast of Peterhead, Scotland where the average wind speed is 10 metres per second, the 30 megawatt (MW) farm is a GBP210 million project.

Hywind Scotland consists of a wind turbine placed on top of a ballasted cylinder (spar-substructure). It combines known technologies in a completely new setting and opens up the possibility for capturing wind energy in deep-water environments.

Masdar has a 25% stake in the project, along with lead operator Statoil, which owns 75%.

The facility consists of five 6MW floating Siemens wind turbines that are anchored to the seabed. The technology can be used in water depths of up to 1km.

The project was inaugurated in October 2017 and provides approximately 20,000 UK homes with electricity, displacing 63,000 tonnes of carbon emissions each year.

Quick facts

- Facility area: 4 square kilometres off the coast of Peterhead, Scotland
- Equipment: five floating Siemens wind turbines with a capacity of 6MW each that are anchored to the seabed
- Installed capacity: 30MW
- Carbon emission reduction: 63,000 tonnes of CO₂ annually
- Homes powered: approximately 20,000

