

Hywind Scotland is the world's first commercial-scale floating offshore wind farm, located off the coast of Peterhead in Scotland, where the average wind speed is 10 metres per second.

The 30 megawatt (MW) Hywind Scotland consists of a wind turbine placed on top of a ballasted cylinder. 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 per cent stake in the project, along with lead operator Equinor, which owns 75 per cent.

The facility consists of five 6MW floating Siemens wind turbines that are anchored to the seabed. The technology can be used in water varying between 95 and 129 metres deep.

The project was inaugurated in October 2017 and provides approximately 22,000 UK homes with electricity, displacing 63,000 tonnes of carbon emissions each year.

Quick facts

- Located off the coast of Peterhead, Scotland, covering an area of 4 square kilometres
- 5 floating Siemens wind turbines anchored to the seabed with a capacity of 6MW each
- Installed capacity of 30MW
- Displaces 63,600 tonnes of CO₂ annually
- Powers approximately 22,000 homes
- First floating offshore wind farm to integrate energy storage

