

#### **A TIDE OF ENERGY**

Enough renewable energy to power around half of Scotland could be harnessed from the tides in a single stretch of water off the north coast of the country, research has suggested.

Some 1.9 gigawatts (GW) of clean energy could be generated by turbines placed in the Pentland Firth between mainland Scotland and Orkney, engineers from Oxford and Edinburgh Universities estimated.

The Pentland Firth has some of the fastest tidal currents in the British Isles, making it a prime candidate for developing marine power schemes.

The engineers said their study narrowed down earlier estimates that the firth could produce anywhere between 1GW and 18GW of power.

They calculated as much as 4.2GW could be harnessed but because tidal turbines are not 100% efficient, the estimate of 1.9GW was a more realistic target.

To fully exploit the potential of the tidal stream in the firth, turbines would need to be located across the entire width of the channel, the researchers said.

They have outlined locations where turbines should be positioned to boost the area's energy producing potential. Sites have been identified by the UK Crown Estate.

