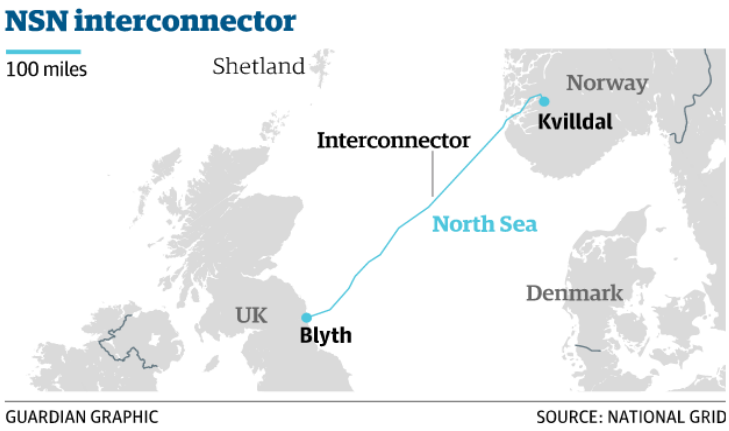
# Europe's Renewable Energy Revolution

Jeremy Plester, The Guardian 16 March 2017

A tunnel under construction beneath a Norwegian mountain is just one link in a new grid that will cross national borders.



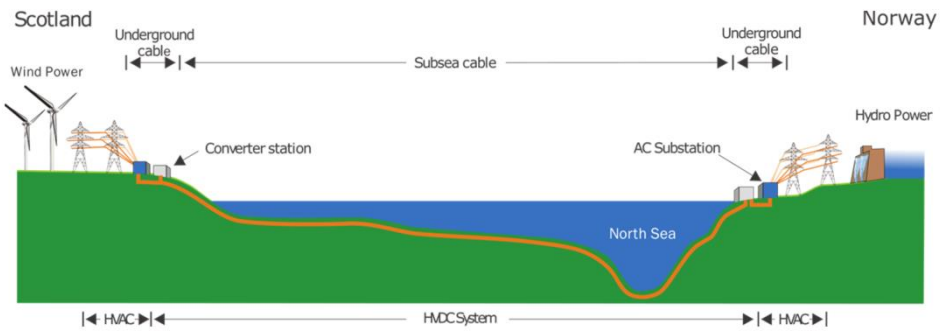

More than 2km down a dark tunnel deep inside a Norwegian mountain, a drilling machine is boring out holes in the rock. It's part of a major project that will connect Britain to Norway's huge hydroelectric power supplies, passing power lines through the mountain near Kvilldal, southwest Norway, before laying the world's longest undersea power cable, 450km long, to Blyth in Northumberland.

It will take years to build, but when it is completed, the UK could import 1,400 megawatts of electricity, enough to power more than 750,000 homes. It will also allow Britain to export any surplus wind energy back to Norway.

**This is just part of a quiet revolution in renewable energy across Europe. An international power grid is gradually developing, using power interconnectors to trade surplus energy across national electricity networks, allowing big wind power producers in northern Europe, for example, to trade electricity with large solar energy generators in southern Europe.**

The UK has already plugged into the network through interconnectors to Ireland, Belgium, the Netherlands and France, and there is a proposal for a highly ambitious project to connect Britain to Iceland's abundant supply of geothermal and hydroelectric power using a subsea cable around 1,000km long.

This international power grid gives more reliable supplies, helping to smooth out the intermittent power produced from renewables such as wind and solar energy. It also gives Britain more secure power sources as old nuclear and out-of-favor coal plants are shut down.




In theory, it could even bring the wholesale energy price down, thanks to the increased availability of cheap renewable power generated far away from where the main energy demand centers are.