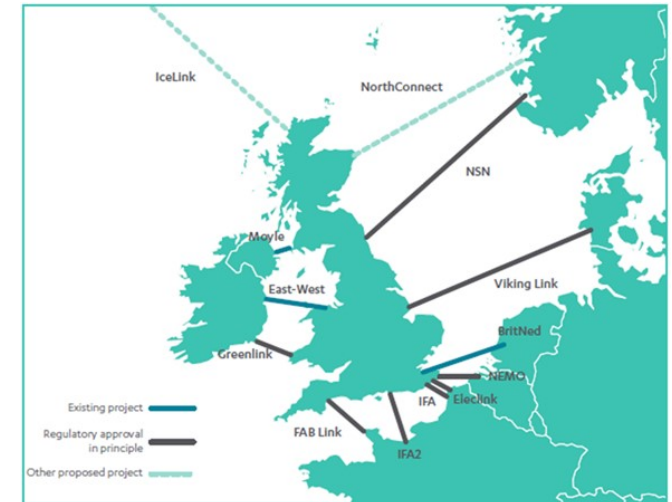


Interconnection and network upgrades

- New cables, transformers and substations could be built to help manage the strain of new power plants and higher electricity demand on the national grid.
- Interconnection with mainland Europe could allow us to export renewable electricity when we have too much or import it when we don't have enough.
- New cables can be disruptive to build and can be expensive.
- Interconnection should reduce the overall cost of energy across countries. However if European electricity prices became consistently higher, interconnection could push up bills in the UK.



Existing and proposed UK interconnectors. Source: NIC (2016)

Key facts

Technologies:

Cables, transformers and substations.
Undersea cables (Interconnectors)

Location:

National Grid. European electricity network

Readiness:

Currently used

Environmental impacts, safety and resource use:

- Laying cables and interconnectors may be disruptive to nearby landscapes and ecosystems.
- Cables are made of copper. Copper mining and smelting can pollute local air and groundwater.

Applications

- Matching supply with demand
- Enables more renewables
- Power quality