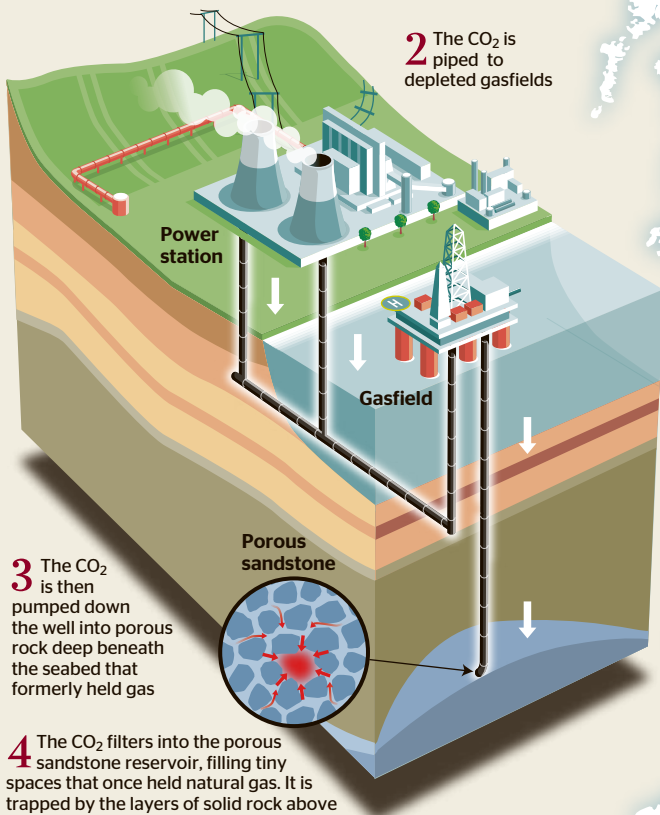


# Going underground

## How it works

**1** Instead of being released into the atmosphere, CO<sub>2</sub> is captured at power stations and compressed

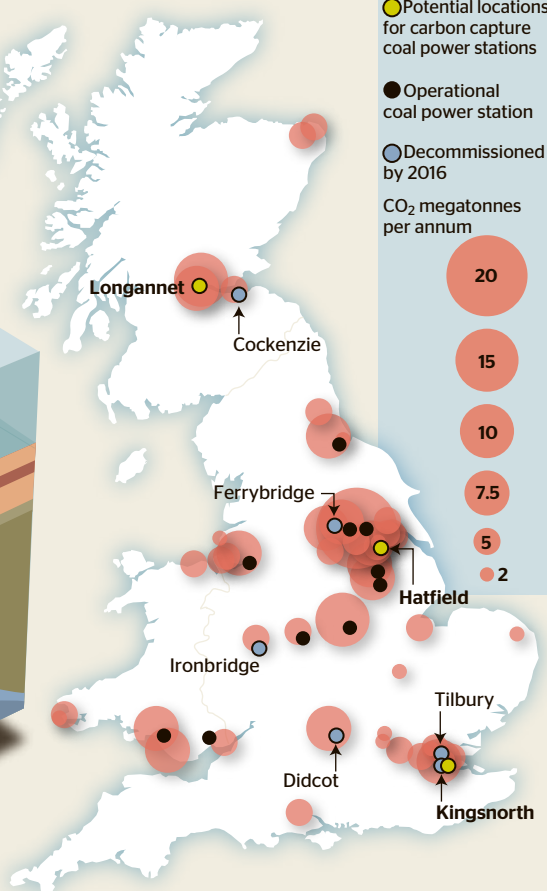
**2** The CO<sub>2</sub> is piped to depleted gasfields



**3** The CO<sub>2</sub> is then pumped down the well into porous rock deep beneath the seabed that formerly held gas

**4** The CO<sub>2</sub> filters into the porous sandstone reservoir, filling tiny spaces that once held natural gas. It is trapped by the layers of solid rock above

## CO<sub>2</sub> emissions from coal



### Key

● Potential locations for carbon capture coal power stations

● Operational coal power station

○ Decommissioned by 2016

CO<sub>2</sub> megatonnes per annum

20

15

10

7.5

5

2

## Clean coal

**Up to 4** new coal-fired power stations to be built in the UK (only one expected previously). Possible locations include Kingsnorth in Kent, Longannet in Scotland and Hatfield Colliery in Yorkshire

**2%** estimated rate customers' bills will rise by 2020 for demonstrations to be funded through a levy

**2015** First demonstration plant due to be operational, probably at Kingsnorth

● All new plants to include carbon capture and storage demonstration projects on a commercial scale

**2025** All of the plants to be retro-fitted across the board with CCS - assuming the technology works

## UK electricity generation by source

