ADVERTISEMENT



Science & Environment

Pump CO2 into rocks, report urges

By Roger Harrabin
BBC environment analyst

12 September 2016 | Science & Environment

Share



GETTY IMAGES

An Olympic-style delivery agency could ensure the costs of implementing CCS are kept to a minimum, says the report

The costs of tackling climate change can be slashed if a network of pipes is built to store waste carbon dioxide under the North Sea, a report says.

The technology - carbon capture and storage (CCS) – involves pumping CO_2 emissions from power stations into rock formations.

It is expensive, but parliamentary advisors say the costs can be halved.

Savings can be achieved if the system to deliver the London Olympics is copied, they tell ministers.

The climate change minister Nick Hurd told BBC News he would welcome new ideas for promoting CCS.

Will carbon capture ever happen in the UK?

The technology is regarded by many experts as an essential weapon in the battle against climate change as it allows the use of fossil fuels to continue until electricity storage for renewables improves.

But last November the government scrapped an industry competition to promote it, citing the £1bn cost.

Now the Parliamentary Advisory Group on CCS says a CO_2 pipeline network created by the equivalent of a stand-alone Olympic delivery agency would solve the problem.

Industrial boost

It says the publicly-owned network could reduce the UK's bill for cutting CO_2 emissions by billions of pounds a year – but only if the government takes a lead by creating the vast network of pipes that will be needed.

The report's chairman, the geologist and former Shell chairman Lord Oxburgh, told BBC News: "There are some things that are best left to the private sector - but CCS on industry isn't one of them.

"The network of pipes taking CO_2 from industrial plant into the North Sea would be far beyond the commercial reach of individual companies. This needs government action."

CCS uses a chemical process to strip CO_2 emissions from the exhaust gases of industrial plant and power stations. The gas is then pushed through pipes before being pumped under pressure into rocks - to be stored (hopefully) for ever. The North Sea is ideal with its many depleted gas fields.

In a report to Business Secretary Greg Clark, the group claims CCS is now ready to be deployed at £85/MWh over a 15-year period – that's significantly below the cost for nuclear power, and comparable to many renewable options.

The report says by 2050, CCS could be responsible for curbing as much as 40% of emissions, saving up to £5bn annually compared with alternative strategies.

Gas dependence

The group included experts from industry and finance as well as representatives from the Conservative, Labour, SNP and Liberal Democrat parties.

Lord Oxburgh warned that the UK would fail to meet its climate targets unless new gas power stations are fitted with CCS.

Critics will say that the huge cost of a CCS network will lock the UK into gas dependency for baseload power for decades while the bill is paid back.

Some academics point out that the key use of gas into the 2030s will be to back up intermittent renewables: CCS will not fit that purpose as the network will need to be used continuously.

The report also proposes the creation of a Heat Transformation Group to assess the options for decarbonising the UK's heating systems - including the possible conversion of the country's gas supply system from methane to hydrogen.

The government was criticised by MPs last week for slipping on renewable heat targets.

The new climate change minister Nick Hurd told BBC News: "We are looking forward to seeing the CCS report. We are keen to get new ideas on how to promote CCS."

Follow Roger on Twitter

Share this story
About sharing

Top Stories

Syria ceasefire 'holding' on first day
A seven-day truce appears to be holding in Syria, with monitors saying no civilian deaths have been recorded during the first 15 hours.
41 minutes ago

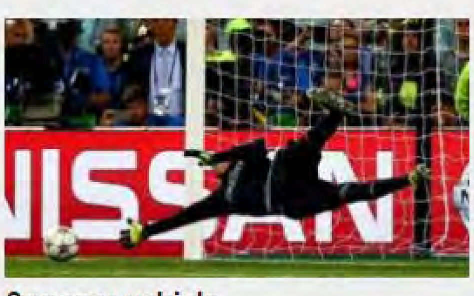
Police move on China protest village
27 minutes ago

Snack Bar painting 'can't leave Australia'
4 hours ago

Features & Analysis



Shock therapy
The 'cures' for homosexuality - as taught by China's textbooks



Sponsor vehicle
Nissan gears up for Champions League football



Muffins and kittens
Are cat cafes good for cats?



'So proud of you'
The emotional photo celebrating a Paralympic journey



Spreading shortages
The country where a small treat costs a relative fortune



Graffiti holidays
South Africa's tourism sector goes niche



Bittersweet memories
Who inspired Roald Dahl's Mrs Pratchett character?



An EU makeover?
Central Europe wants new post-Brexit order



Tackling taboos
AlunaGeorge on sexism, racism and forging a new sound

Science & Environment >



Bezos names next rocket New Glenn
12 September 2016 | Science & Environment



Russia firm admits 'red river' spillage
12 September 2016 | Europe



Solar-powered tuk-tuk arrives in UK
12 September 2016 | UK

Most Popular

Read | Watched

1. Germany arrests three 'on IS mission'
2. Hungary 'should be excluded from EU'
3. Pioneering painting export blocked
4. Clinton 'kept diagnosis to close aides'
5. Syria ceasefire 'holding' on first day
6. The dearest Nutella in the world?
7. Eyes backwards to prevent lion attacks
8. Why India's food police are kicking up a storm
9. Japan official criticised for piggyback
10. US flies B-1 bombers over South Korea

More Videos from the BBC
Recommended by Outbrain



Monowheel rider speeds into record books



Stalking victim's family welcomes increased police powers plan



Asian gold gang 'organised and sophisticated'



Stalin's victims painted from history



What does a train line closed 50 years ago look like now?



'How dare you talk down the country that you've damaged'

Elsewhere on BBC
Recommended by Outbrain



BBC News
Schoolboy, 11, crowned King of England at Gloucester Cathedral



BBC Travel
The city that lives a double life



BBC News
Incest charges for Oklahoma mother and biological daughter



BBC Travel
Hawaii's unpronounceable treasure

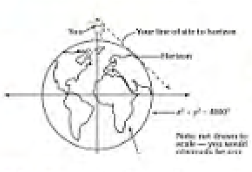


BBC News
Masterchef contestant death: Tribute to Helen Barker

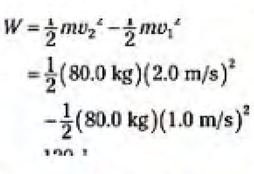


BBC Future
The pilot who stole a secret Soviet fighter jet

From Around the Web
Promoted content by Outbrain



Calculate the Distance to the Horizon Using…
Dummies.com



Power Problems in Physics
Dummies.com



Frank Zappa's Estate, Complete With Recording…
Mansion Global



North Korea doubles down on nuclear for its…
Nikkei Asian Review



Celine Dion's Jupiter Island Estate Now $27…
Mansion Global



Arnold Amps Up His Hummers to Use Renewable…
Muscle & Fitness

Ads by Google

Pump Industrial
Supplies Made to Order from World's Largest Supplier Base. Top Deals!
www.alibaba.com/Pump-Industrial

Electrical Guide
Wiki: How to design a metering system
www.electrical-installation.org

Air pump
Quality Air pump From China Supplier & Manufacturer
www.ecer.com

Copyright © 2016 BBC. The BBC is not responsible for the content of external sites. Read about our approach to external linking.