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UK Policy on CCS

***Dr. Nick Riley MBE, C.Geol, FGS
Head of Science: ENERGY***

&

***Co-ordinator CO₂ GeoNet Research Network of Excellence
British Geological Survey Keyworth, Notts, UK***

njr@bgs.ac.uk

www.bgs.ac.uk

[**www.CO2geonet.com**](http://www.CO2geonet.com)

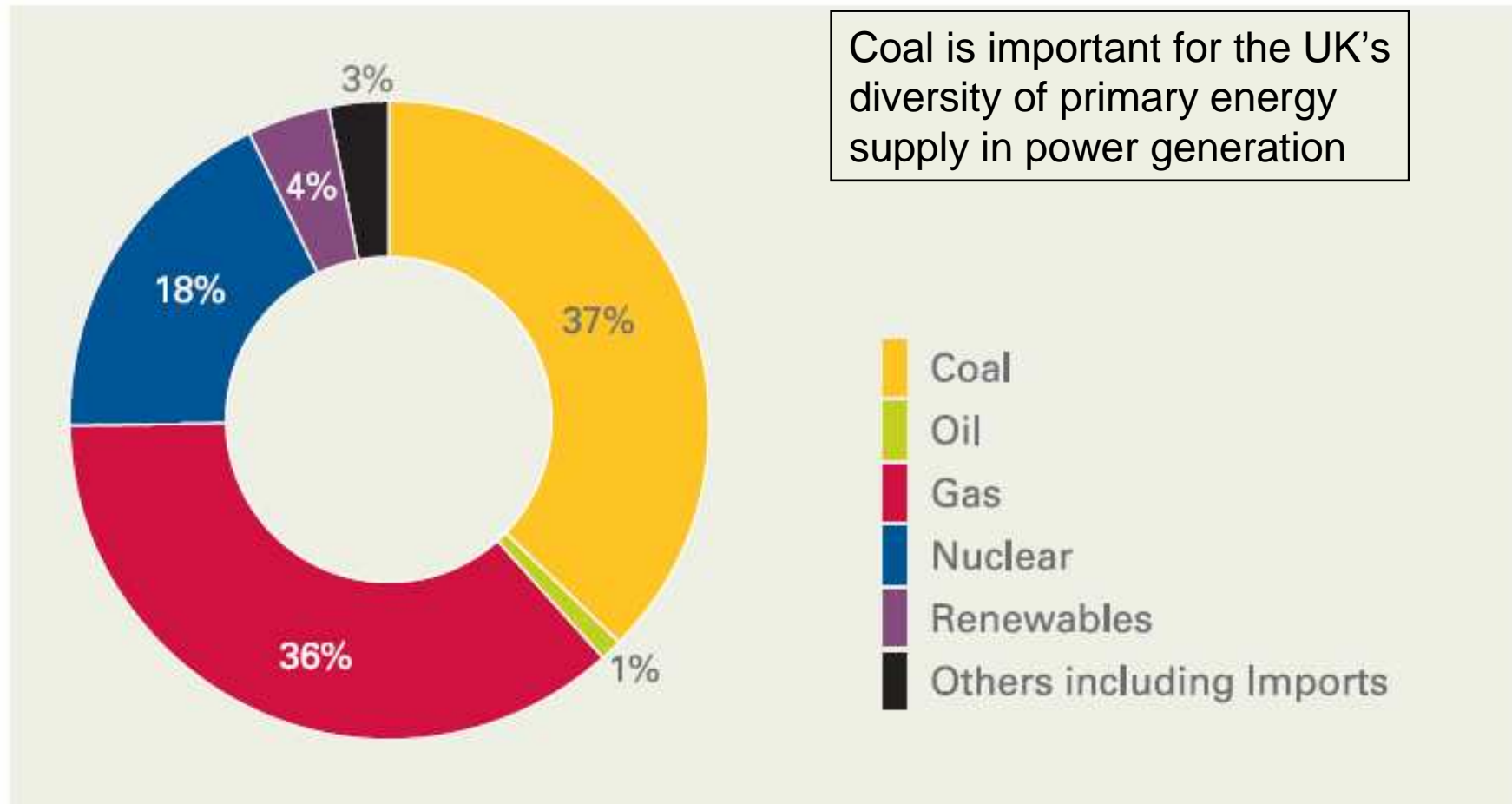
For UK energy policy see <http://www.berr.gov.uk/energy>

UNECE, Geneva, Nov 27, 2007





FIGURE 5.1.1 2006 UK ELECTRICITY GENERATION MIX



Source: DTI, 2007



UK will need about 20-25GW of new generating capacity by 2020
If coal is to remain in the mix then new or refurbished coal plant being planned now will, ideally, need to be able to deploy CCS from that date. This also aligns with EC policy aims

5.1.11 Over the next two decades, the UK will need substantial investment in new generation capacity to replace the closing coal, oil and nuclear power stations, and to meet expected increases in electricity demand. Our analysis shows that 22.5GW of existing power stations may close by 2020¹²³. Of this, 8.5GW of coal-fired capacity will close to meet the requirements of the EU

Large Combustion Plant Directive (LCPD) by end 2015; as will about 2.5GW of oil power stations (see Box 5.1.2). Around 7GW of nuclear power stations are also scheduled to close between now and 2020, on the basis of their currently published lifetimes.

5.1.12 If we are to maintain levels of electricity generation capacity equivalent to those available today, then new power stations need to be built in good time to replace these closures and to meet increases in demand. On this basis, around 20-25GW of new power stations will be needed by 2020.

(Energy White Paper 2007)



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CLEAN COAL IS VITAL

“It is in our own vital interest that the technologies necessary to make coal generation low carbon are developed and deployed as rapidly as possible, since fossil fuels will continue to be a significant part of the energy mix globally for some time to come (on the basis of governments’ present policies, fossil fuels will provide almost 70% of global electricity demand by 2030)”

(Energy White Paper 2007)



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CCS & Foreign Policy

The Stern Review highlighted the strategic role that CCS technology could play globally to lower carbon emissions, with the potential to contribute up to 28% of global CO₂ mitigation by 2050, particularly in fast-growing economies with rising fossil fuel consumption such as China and India.

The demonstration of commercial-scale CCS on power generation in the UK could enable the technology to be proven and facilitate a better understanding of the costs. In turn this could contribute to the deployment of CCS on a national and international basis

(Energy White Paper, 2007)



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UK CCS DEMO meets both domestic and international UK policy goals

Competitive call launched 19th Nov 2007

Further details on the competition available on

<http://www.berr.gov.uk/energy/sources/sustainable/carbon-abatement-tech/ccs-demo/page40961.html>

- Single project
- Offshore CO₂ storage
- Coal
- Post-combustion capture
- 300 MW
- operational by 2014

Addresses:

- CO₂ “lock-in” from existing and planned coal fired plant worldwide
- Provides one of the 12-15 commercial scale demos desired by the EC by 2015
- Meets an important gap in the international portfolio of demonstrations



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Engaging emerging economies

“NZEC was announced in September 2005 at the EU-China Summit. It is expected to result in the construction of the first CCS demonstration project outside the OECD by 2020. The project has three phases:

- Phase 1 (2006–2008) – to identify early demonstration opportunities;
- Phase 2 (2009–2010) – to define, plan and design the project; and
- Phase 3 (2011 onwards) – to construct and operate the project.

Phase 1 is already underway with €1.5 million of EU funding and a UK contribution of £3.5 million

The Government is also starting collaboration with India to develop understanding of CCS. The Government supported a CCS research conference in India in January 2007.”

(Energy White Paper 2007)



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UK Norway CCS Task Force

“The UK and Norway have been collaborating for 2 years on how we should manage the transportation and storage of carbon dioxide in the North Sea. In December 2005 Energy Ministers from both countries signed an agreement to establish a North Sea Basin Task Force made up of both industry and Government personnel to look into matters of common interest. This Task Force is currently overseeing two key pieces of work examining a compatible regulatory regime and a common carbon dioxide transport infrastructure.”

(Energy White Paper 2007)



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EU Zero Emission Technology Platform (ZEP)

“The UK has also been very active in the EU Technology Platform for Zero Emissions Fossil Fuel Power Plant. At both industry and government levels we have been taking a leading role in developing strategies for deployment and research of CCS technologies on a European scale. The Technology Platform’s aim is to have commercially viable CCS as a technology of choice by 2020.”

(Energy White Paper 2007)



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CCS REGULATION

“We will work with the European Commission and other Member States on an EU strategy to develop CCS for new fossil fuel power stations by 2020, if technically and economically feasible to do so.

- We will continue to promote the reform of international regulations affecting CCS.
- We are actively pursuing recognition of CCS in Phase II of the EU Emissions Trading Scheme and full inclusion within the scheme beyond 2012.”

(Energy White Paper 2007)

Also:

UK has taken a lead in gaining recognition of sub-seabed storage of CO₂ within the London Convention and its Protocol (which is a global agreement) and the OSPAR Convention (which covers the NE Atlantic Region)



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THANK YOU!