

Research Councils UK Energy Programme and CCS

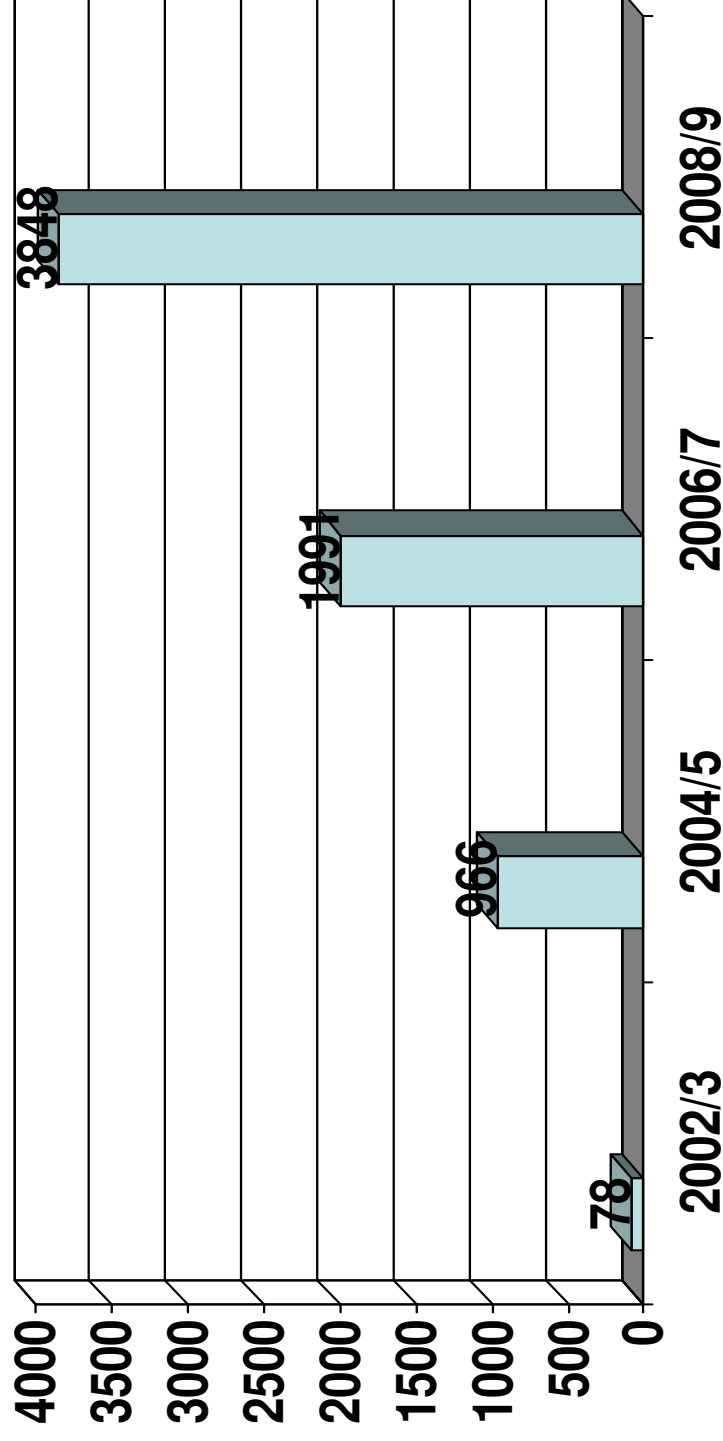
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Carbon Capture and Storage: the growth in our portfolio



Expenditure by year (£k)



Carbon Capture and Storage: Coordination through a network



Our vision for this network is that it will enable:

- Coordination within the research community and sharing of results in this fast growing field
- Engagement with stakeholders and pilot projects
- International engagement
- Development of researchers
- Encourage involvement from researchers new to the area
- Easy “route in” and information source.

Carbon Capture and Storage: Current Support



CCS has been identified as a priority area for the Energy Programme. We now support over £38M in current grants for 36 research and capacity building projects in CCS including:

- A network to coordinate activities and develop the research community. £1m investment.
- 4 Consortia researching carbon capture and transport (3 jointly supported with E.ON). £6.5m investment.
- Projects on Cleaner Fossil Fuels in collaboration with China.
- Capacity building award for 6 new lectureships in CCS to Edinburgh and Heriot-Watt universities.
- Centres for Doctoral Training.
- Centre for Innovation in CCS at the University of Nottingham
- CRIUS project at University of Cambridge which seeks to evaluate the kinetics of fluid-rock interactions in reservoirs.

Carbon Capture and Storage:

Major research investments 2009-10

NERC-EP SRC call

- Multiscale whole systems modelling and analysis for CO₂ capture, transport and storage: Imperial led (Durucan), £1.5m (EP SRC funded)
- Quantifying and monitoring potential ecosystems impacts of geological carbon storage: PML led (Blackford), £1.5m (NERC funded)

UKERC call

- CCS: Realising the potential: Sussex led (Watson). Proposal funded through UKERC grant from EP SRC, NERC and ESRC.

Nanotechnology- carbon capture and utilisation call

- Bio-inspired (Fe,Ni) nano-catalysts for CO₂ conversion: UCL, £1.1m
- Nano-integration of metal-organic frameworks and catalysis for the uptake and utilisation of CO₂: Bath led, £1.2m
- Nano-structured catalysts for CO₂ reduction to fuels: Imperial led, £1.7m

Carbon Capture and Storage: Activities and opportunities 2010 -

Projects

- Call for CCS technologies in partnership with NSFC in China (£2m plus matching resources from NSFC). Closing 15 April.

Coordination and networking

- Network underway to take forward the work of the UKCCS Consortium and bring together the different activities in CCS

Exploitation

- One of the public sector funders of ETI.

International

- China call as above.
- CCS workshops being held in US in May to explore opportunities for collaboration.
- Australia planning return Mission to UK.

Carbon Capture and Storage: Activities and opportunities 2010 -

Future activities

- We have taken forward almost all of the recommendations from a community meeting held in February 2008.
- We have massively increased the support for research and capacity building in CCS.
- Where are the gaps and challenges and what should we be doing next?

Views and ideas welcomed