

*UK CCS Demonstration*

Industry Day

17 October 2007

Bronwen Northmore

## John Hutton's Announcement of 9 October:

- Single Project
- Offshore Storage
- Coal
- Post-Combustion
- 300 MW
- Phased Approach

# Single Project

- Government is prepared to fund up to 100% of CCS costs (not including the power plant)
- Subject To:
  - Affordability
  - State Aid clearance

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# Offshore Storage

- Changes to regulatory regime achievable within project timetable
- Expect to revisit onshore storage in due course

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# Post-Combustion Coal

1. International Landscape
2. UK Landscape
3. Competition Design

Includes Oxyfuel

# International Landscape 1

Other commercial-scale funded demonstrations:

- Futuregen Coal IGCC: 275MW, Illinois or Texas, 2012
- Statoil: Post-Combustion gas, Mongstad, 2014, Post-Combustion gas Retrofit, Karsto, 2014
- UK project to complement other demonstrations
- European Commission intention to have 10-12 CCS demonstration projects by 2015

## International Landscape 2

- Pulverised fuel accounts for vast majority of existing & planned coal fired plant globally
- Without CCS, generally preferred technology is pulverised coal
- Only post-combustion can be retrofitted – tackles carbon lock-in

# International Landscape 3

(World Energy Outlook 2006 Analysis)

Between 2015 & 2030 (excluding replacements & retrofit):

around 350GW increase in coal generation in China,  
120GW In India

around 140GW IGCC capacity globally, 50%+ in USA

IGCC will account for less than 20% of new capacity added globally between 2015-2030, and over half of that will be in the USA

# UK Landscape

- Proposals for new & retrofit coal capacity in UK are supercritical pulverised fuel
- Capture Ready

# Competition Design

- 2 Key Objectives:
  - Deliver successful demonstration of full chain of CCS technologies on power plant at commercial scale
  - Demonstrate technology that is relevant & transferable to key global markets particularly in emerging economies
- Clarity for you to bid against

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# 300MW

- Commercial scale project
- Partial capture on a large unit is OK

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# Phased Approach

- Demonstration of full CCS chain by 2014 is very important
- As is demonstrating commercial scale
- But recognise that 300MW by 2014 may present challenges
- Understand there may be advantages in sequential demonstration
- For discussion

# Demonstration Vs Deployment

- Policy objectives have led us to post-combustion on coal for demonstration in the UK
- Set against international landscape
- Not taking a view on relative merits of technology – this is not a technology development programme
- Speeding deployment of CCS
- Working to set framework for subsequent wider deployment of CCS - regulation, EU ETS, Post 2012 Kyoto, etc.

# Next Steps

- Bilateral discussions
- Competition launch planned for mid November

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