

CCS Funding Mechanisms and International Cooperation on CCS

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CCS – why is it so hard to fund?

- ▶ IEA analysis suggests that global mitigation costs to 2050 would be 70% higher without CCS - so surely CCS is a cost-effective technology choice?
 - ▶ Yes – but only relative to even more expensive low C alternatives. Still much more costly than BAU.
 - ▶ Without a global cap and a global carbon price – can this be translated into an economic incentive at national level, and for individual companies and investors?
 - ▶ BECCS similar – but may be able to blend with RE incentives and add value of additional carbon saving
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Financing CCS in Emerging Economies

POSITIVE

- ▶ Emerging economies provide low cost options to aid commercialisation of CCS
- ▶ Bulk of deployment will need to be in emerging economies rather than developed countries
- ▶ CO₂ mitigation in all countries required, and lead times are long – need to deploy in parallel
- ▶ Technology transfer and finance are key planks of UNFCCC deal

NEGATIVE

- ▶ Developed country governments that are supportive of CCS are often struggling to provide sufficient support to enable even domestic demonstrations to move forward.
- ▶ Policy frameworks in developing countries are often poorly developed and political commitment is patchy.
- ▶ Some countries prefer to focus on other commercially available technologies to reduce emissions from generation



What money exists for CCS?

Asian Development Bank CCS Trust Fund

- ▶ established with a contribution from Government of Australia and GCCSI

World Bank CCS Trust Fund

- ▶ established with a contribution from Government of Norway and supplemented with money from GCCSI

CSLF Capacity Building Fund

- ▶ multidonor fund (including UK, USA, Norway, Australia and Canadian contributions)

UNFCCC Green Fund

- ▶ agreed in Durban that there would not be any technology window [meaning no guarantee of CCS projects being funded]

CDM revenues

- ▶ Durban decision means CCS projects are now eligible for CDM support but CDM is insufficient in isolation to meet costs of CCS demonstration activities



What's the gap?

- ▶ Much of the financing currently available is for technical assistance. Little project financing currently on the table (CDM being exception)
 - ▶ Governments will only commit human resource to CCS if they see money available to support demonstration and deployment
 - ▶ Operational costs of plants (power or industry) are increased when CCS deployed and in developing countries not always possible to pass increases downstream.
 - ▶ Developed country governments are struggling to bridge gap to support domestic commercialisation
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What needs to happen?

In the future – CCS needs to make sense in economic terms, under prevailing fuel and carbon costs. But this will require lower technology costs, lower energy penalty and much higher carbon price.

To get demonstration projects underway...

- ▶ Developed countries need to find a way of collaborating to mobilise large scale finance for demonstration in 3rd countries. Too costly for any one donor on its own.
- ▶ Developing countries, in conjunction with major energy supply companies need to look at ways of working together and sharing benefits



UK activity to support CCS

- ▶ £1bn committed to UK demonstration programme
- ▶ £60m commitment to supporting CCS activity in developing countries, via World Bank and ADB. Likely beneficiary countries include Indonesia
- ▶ Initiated the NZEC programme in China
- ▶ Provided support to CSLF capacity building activity
- ▶ Supported study: “*Understanding Carbon Capture and Storage Potential In Indonesia*”



▶ Thank You

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