UNIVERSITY OF CAMBRIDGE | Electricity Policy Research Group

E·S·R·C ECONOMIC & SOCIAL RESEARCH COUNCIL

Promoting Investment in Clean Fossil Fuel Technologies

David Newbery

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Why promote such investments?

- Is CCS viable at likely EUA prices?
  - Or does it need additional support?
- Is the option value of making plant capture-ready sufficient for commercial investment?
  - If not is this socially worth subsidy?
- Would trial plants deliver learning spill-overs justifying additional support?
  - Is the best technology well defined yet?
  - Is the benefit in linking the parts?

Where best to promote investment?

- Who has comparative development advantage?
  - Chinese technical universities like Tsinghua?
  - Plant with access to EOR?
- Who captures the learning benefit?
  - equipment manufacturers? In what country?
- Where best to demonstrate storage?
  - to overcome public suspicion?
  - to test out unresolved geological concerns?

How best to promote investment?

- Tender for capacity subsidy?
  - Would EUA justify extra running costs?
  - Or is a feed-in tariff also needed?
- What scale of plant delivers highest learning spill-over per $ subsidy?
  - 30MW? 300 MW? 660 MW? 1,300 MW?
- How are China, India, SA best encouraged?

Who should pay?

- Include it in cost of electricity?
  => Poor consumers subsidise R&D
- Public funds (as with most nuclear R&D)?
- Revenues from auctioning EUAs?
  – No point in allocating any to ESI