



# NZEC Policymakers Tour: The economics and financing of CCS

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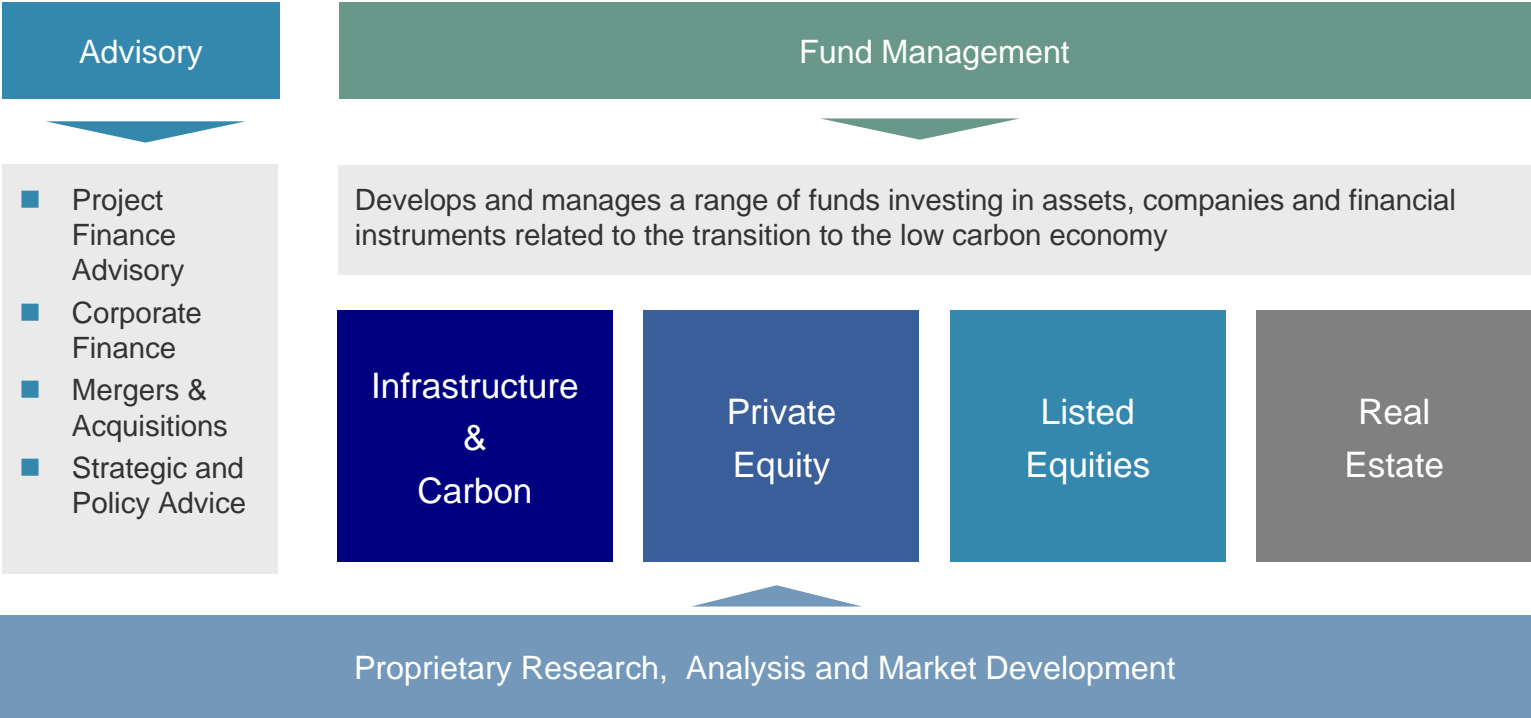
27 March, 2009

# Climate Change Capital

**Climate Change Capital (“CCC”) is an investment manager and advisor specialising in the opportunities created by the transition towards the low carbon economy. Our activities aim to make the world’s environment cleaner while delivering attractive financial returns.**

CCC is headquartered in London and has offices in Beijing and Boston.

Through the combined talents of investment professionals, market specialists, thought leaders and access to a significant capital base, CCC is perfectly placed to deploy capital, at scale, to accelerate the transition to the low carbon economy. We call this creating wealth worth having.



# CCC has been at the forefront on CCS from both commercial and policy perspectives

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## Capital-raising for Progressive Energy (PEL) and ongoing adviser

- PEL is a clean energy project development company which specialises in developing low-carbon power stations and infrastructure for the capture and storage of carbon emissions
  - CCC arranged a capital raising from Centrica and is PEL's ongoing adviser
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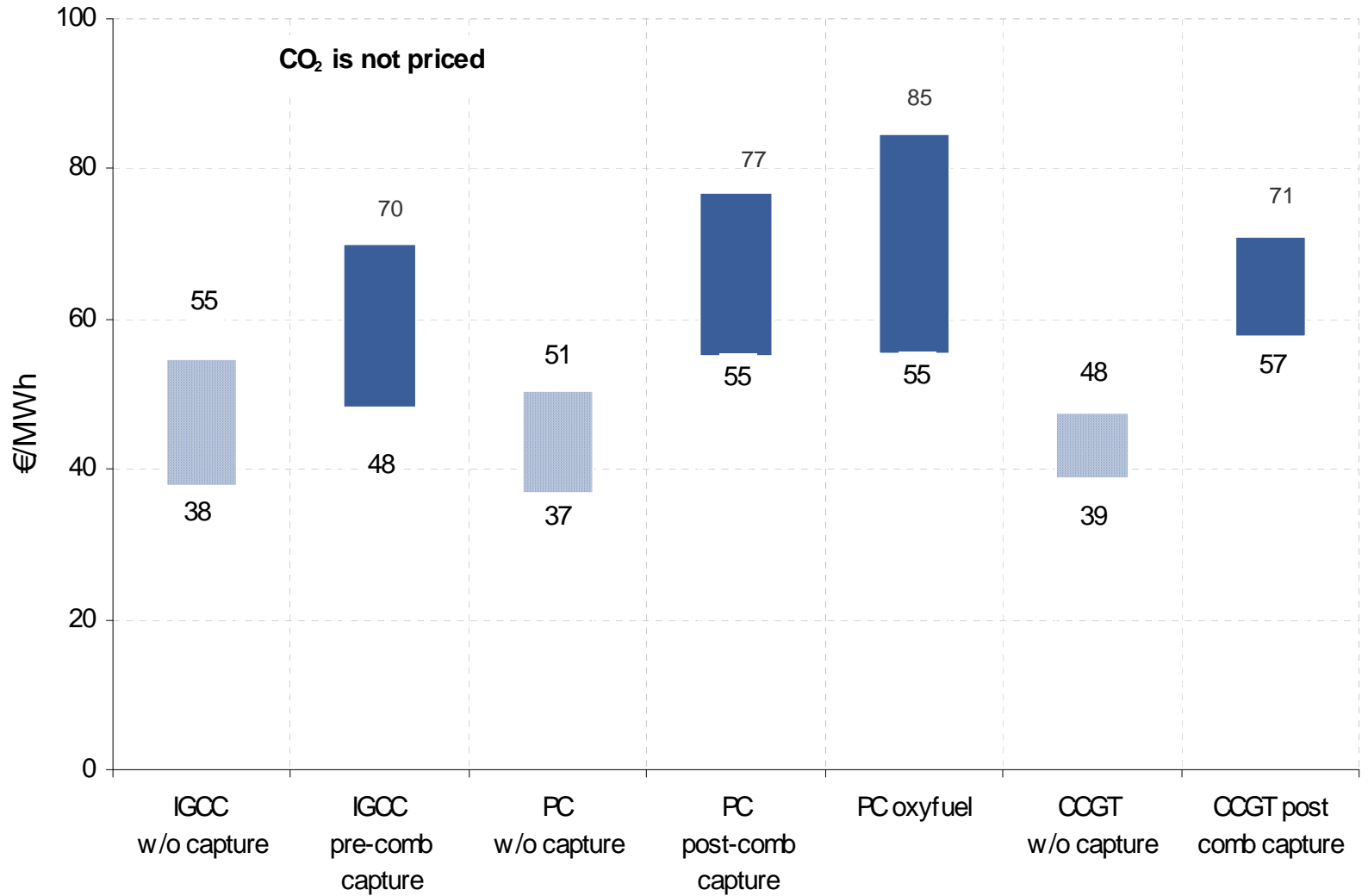
## Policy advice to ZEP

- In 2007, CCC advised on the most suitable and deliverable mechanism for financing the EU Flagship Programme of 10 – 12 commercial scale demonstration CCS plants operating by 2015
  - CCC's report is cited in the European Commission's January 2008 publication, SEC(2008) 47, part of the EC's January Energy Package
  - CCC's work also formed the basis of a legislative proposal being introduced to the European Parliament by the CCS Directive's Rapporteur, Chris Davies MEP, and the ETS Directive's Rapporteur, Avril Doyle MEP
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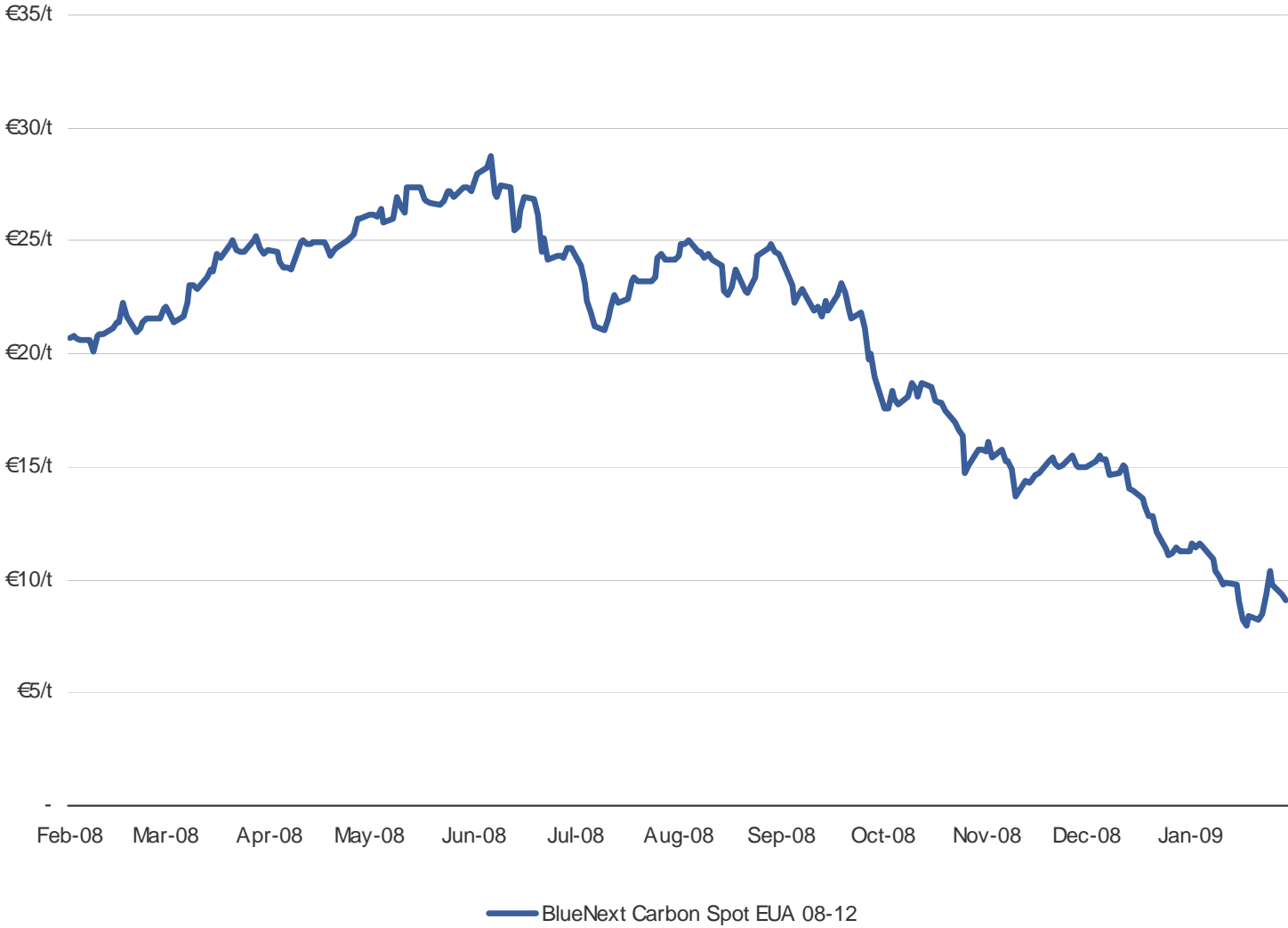
## Policy advice to the Alberta CCS Council

- CCC has been engaged by the Government of Alberta in Canada to advise its CCS Development Council on suitable funding mechanisms for supporting immediate advancement of CCS
- The Government of Alberta has allocated \$2bn to kick start CCS in the province, and is seeking the Council's advice on how the funds should be allocated.

# Dealing with cost uncertainty is crucial

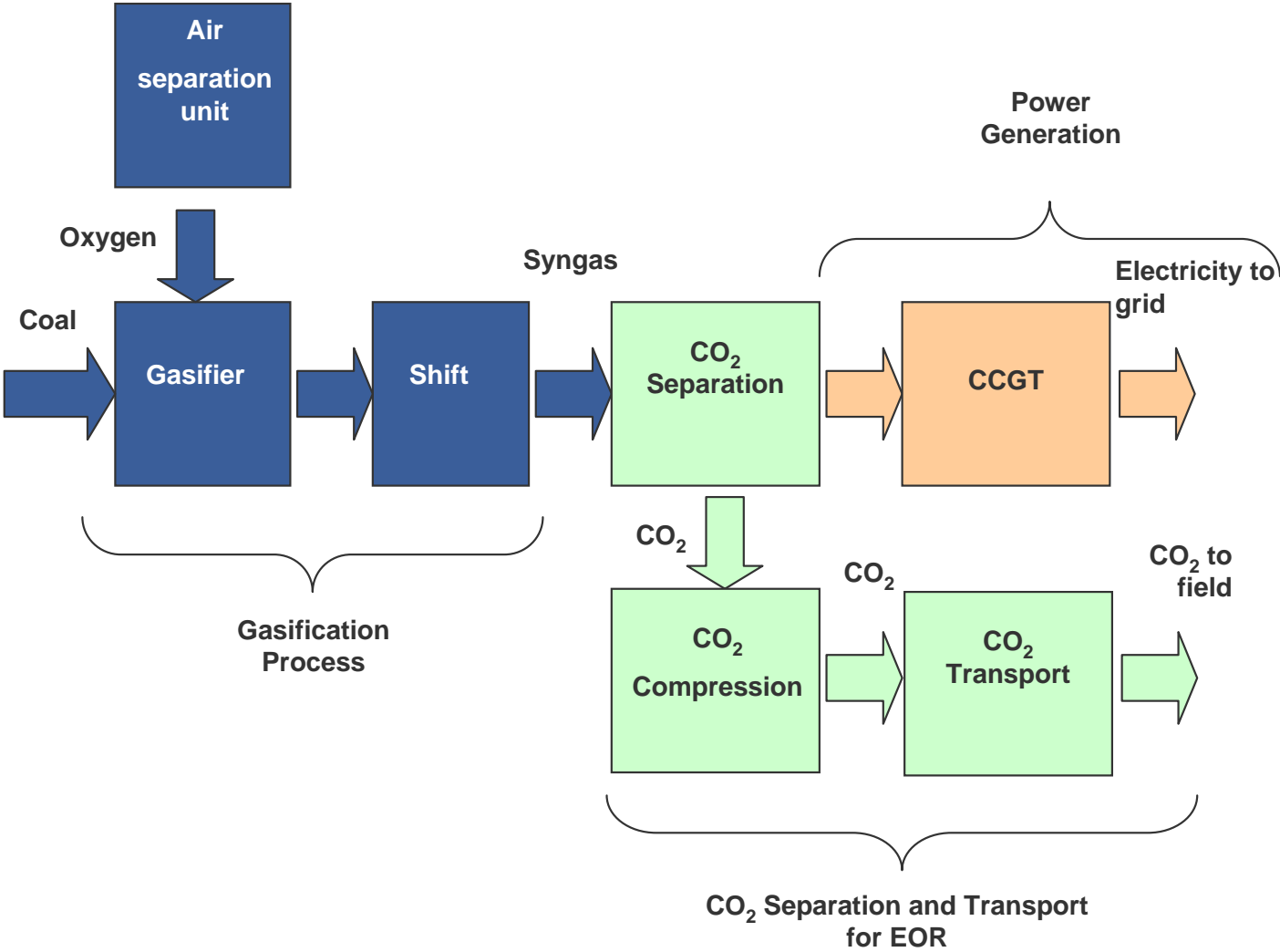


# Carbon alone will not incentivise CCS and is highly uncertain



Source: DataStream

# Rigorous risk allocation is crucial from the start of any process



# Worry about project economics and commercial structure, but not project finances – for the moment

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- Project finance not available to early projects today....
- ... but might be by the time they need it ....
- ... but likelihood of consortia of equity sponsors
- You should always prepare for project finance anyway
- Corporate capacity for investment will be an issue ...
- ... but extent of capital requirement for energy market is a general issue
- “Credit crunch” currently not that important to projects – too early

# Incentivising CCS: Do not run a competition!

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- “Competitions” did not lead to effective price discovery ever before the economic crisis
  - ▶ UK
  - ▶ Futuregen
  - ▶ Etc.....
  
- In the context of the economic crisis it will lead to even more failures
  - ▶ Corporate risk appetite reduced
  - ▶ Liquidity contracted
  - ▶ Debt finance hardly available
  
- Some simple rules
  - ▶ Make sure everyone one can win (eventually)
  - ▶ Understand need to invest money in order to know costs
  - ▶ Make sure project is funded from the start (we know enough to know how much it costs)

# Contact Climate Change Capital

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