TEESSIDECO2LLECTIVE

A NEW INDUSTRIAL FUTURE FOR THE UK

Industrial CCS Project

CCS for the chemical industry

Jay Brooks BOC

7th September 2015 – Strathclyde workshop

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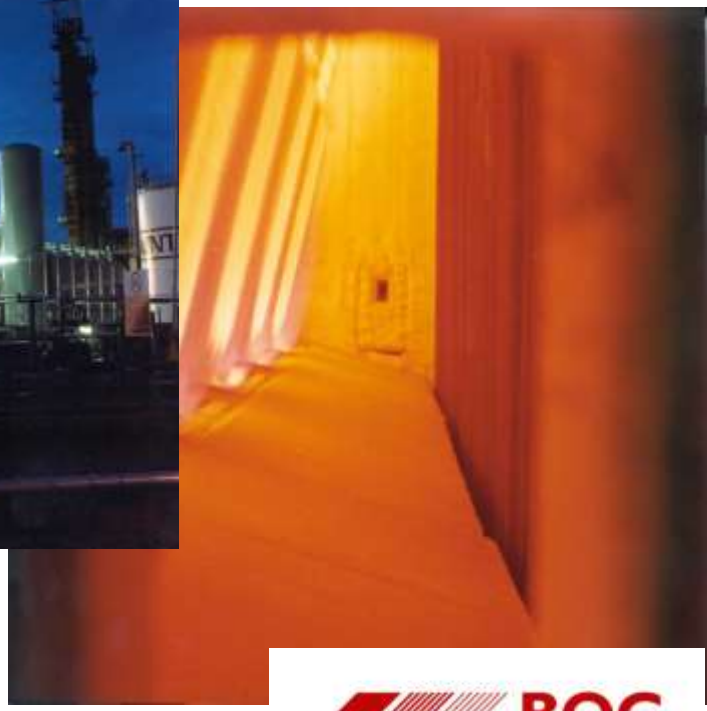
BOC Teesside Hydrogen



ICCS Teesside

- Progressive Energy 8 year relationship
- Teesside Collective TVUL leadership
  - North East Business links (NEPIC)
  - Pale Blue Dot
  - AMEC FW
  - Voluntary steering group

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Teesside Collective 2030

https://www.youtube.com/watch?v=Aa71J9Rnw1w

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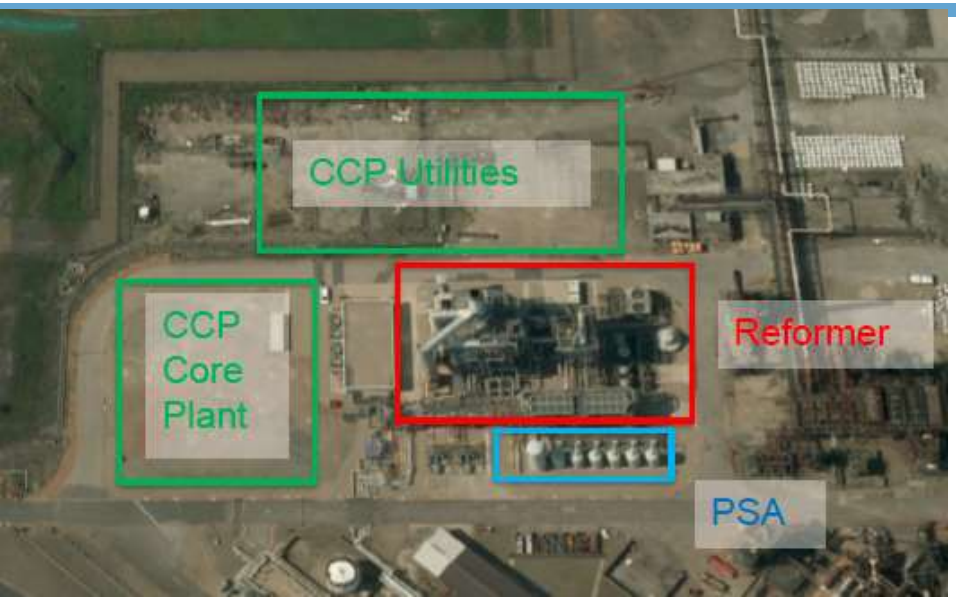
Research Challenges

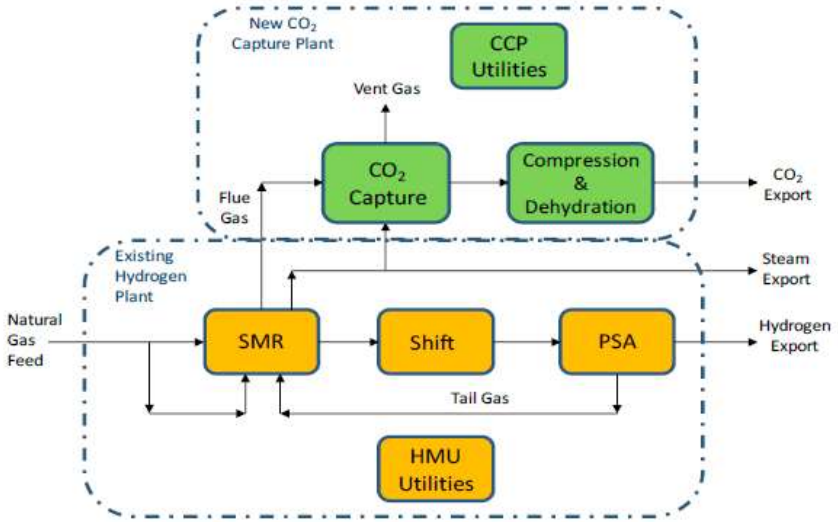
Technology choice
Pilot plant or full scale
Links with key industries or companies

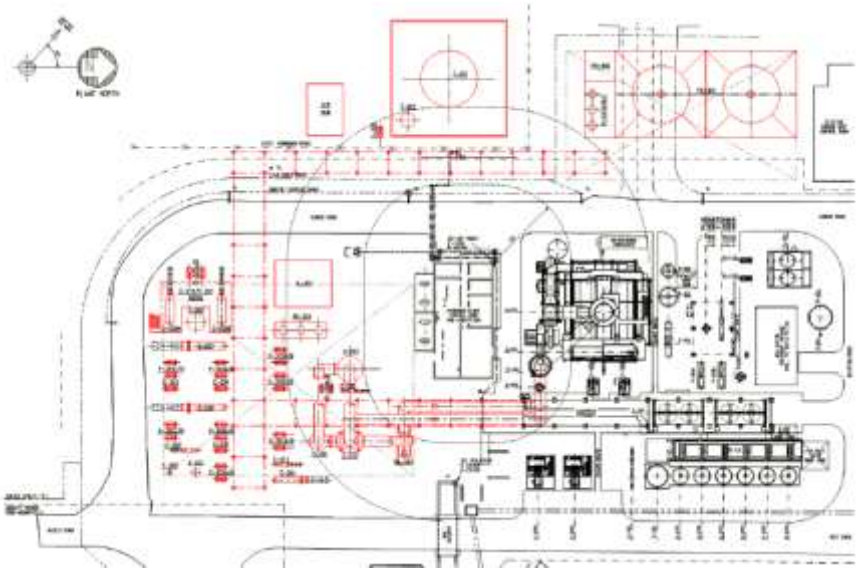
Support business to reach cost effective solutions in required timescales

Drive down the cost curve

BOC Teesside Hydrogen research challenge







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BOC Teesside Hydrogen research challenge

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- CCP Design : Conventional Amine Process (MEA)
- No significant impact on the Hydrogen Plant
- Reforming CO_2 : 21.5 te/h
- Combustion CO_2 : 17.8 te/h
- CO_2 Capture Rate : 305 ktpa
- Total power consumption of the CCP : 5.9 MW
- Specific power consumption : 0.166 MWh/te CO2
  0.61 MWh/te Carbon
- Estimated TIC £55.1m
- OPEX (fixed + variable) : £4.66m/year (estimated) plus power & utility
- Overall Schedule : ~58 months from start of pre-FEED to RFSU.

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Summary - Beat that

In a constructive collaborative and timely manner

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Back up slide

- TH2 PFD
- List optional tech choices

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