The UK « Coal Forum » and Carbon Capture and Storage Development Programme

European Social Partners' Conference on Initiatives involving social partners in Europe on climate change policies and Employment

Giles Dickson, Vice President Government Relations Europe

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UK Coal Forum

- set up in 2006
- “to work to ensure that we have the right framework, consistent with (the government’s) energy policy goals, to secure the long term contribution of coal fired power generation and optimise the use of economical coal reserves in the UK”.

UK Coal Forum covers all angles ….

- **security and diversity of energy supply:** coal 1/3 of UK electricity
- **climate change**
- **mobilising investments required**
- **public perceptions**

Active engagement of both sides of industry gives credibility to the messages

… and harnesses range of economic interests

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- indigenous coal **producers** want to retain production output of 20 m tonnes p.a. for the foreseeable future
- coal as a national **socio-economic asset**
- coal as a contributor to **security of supply**
- electricity **generators** want to keep coal in the generating mix for the diversity and flexibility it offers, in the expectation that it will use CCS in the longer term

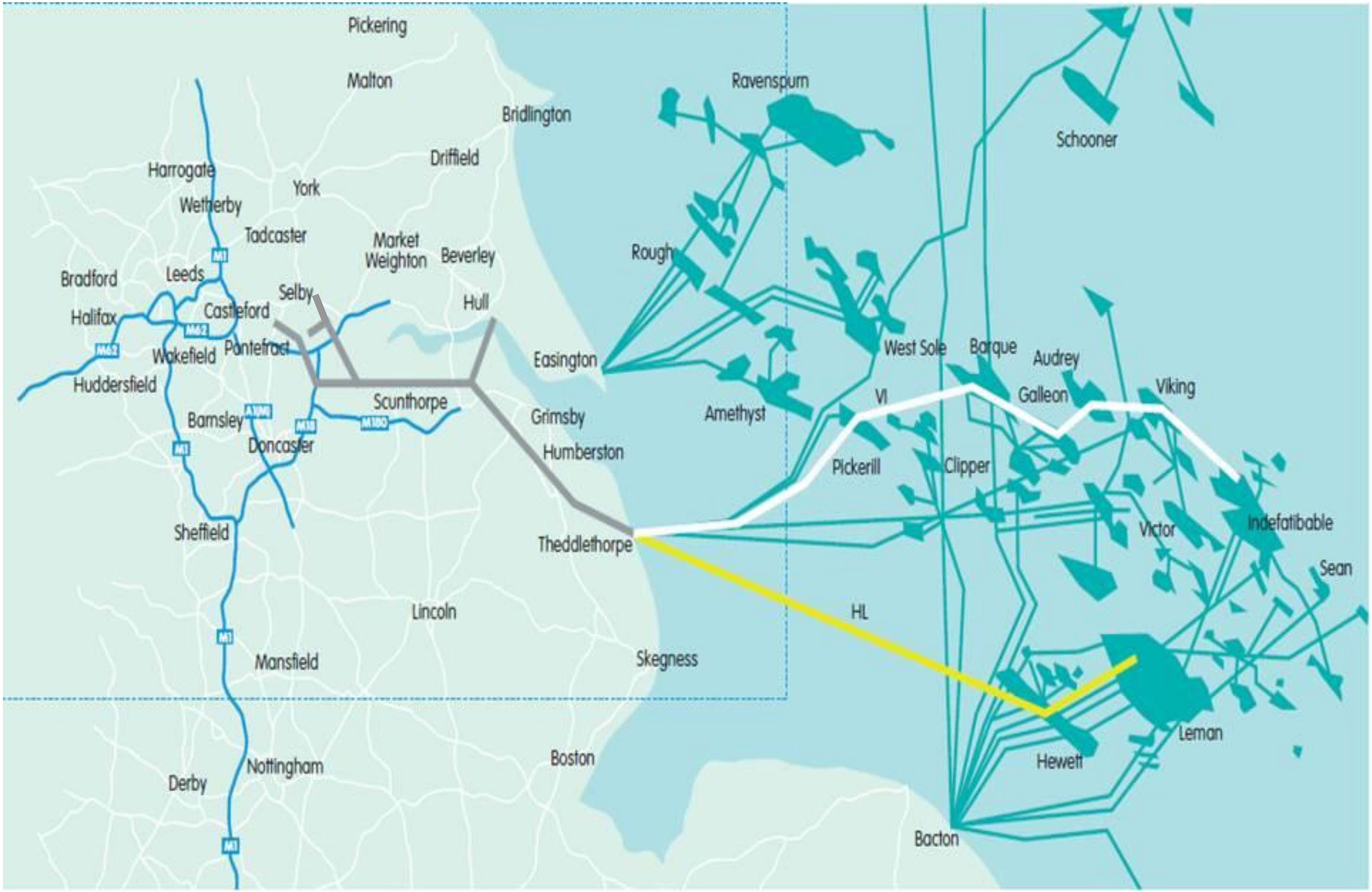
CCS - UK

- By 2020, over half of UK's electricity will still be fuelled by coal/gas.
- CCS has potential to create up to 100,000 jobs & could be worth £3–6.5bn a year to UK by 2030 (source: DECC)
- UK has already put in place one of most comprehensive policy/regulatory frameworks in world – e.g storage permitting regime.
- Estimated CO2 storage capacity of UK/continental shelf is 22 GTs. Roughly 100 years of emissions from power sector. (source: DECC)
- Govt announced up to £1bn for first commercial-scale CCS demo - more than any govt anywhere has committed to any single project.
- Govt plans to launch a call for proposals after this year's Budget for demos 2-4 and to select those projects by the end of 2012.
- Govt exploring ongoing support mechanism in Electricity Market Reform.

UK NER300 CCS bids

- Drax (Drax, Alstom): New build, Oxy-combustion, coal
- Hatfield (Powerfuel): New build, IGCC, coal
- Hatfield (Powerfuel, B9 Coal): New build, IGCC (with fuel cell), coal
- Killingholme (C.GEN): New build, IGCC, gas
- Hunterston (Peel Energy, Ayrshire Power): New build, Post-combustion, coal
- Longannet (Scottish Power): Retrofit, Post-combustion, coal
- Peterhead (SSE): Retrofit, Post-combustion, gas
- Lynemouth (Alcan, Progressive Energy): Repowering, IGCC, coal
- Eston Grange (Progressive Energy): New build, IGCC, coal

North Sea storage opportunities



Alstom activity on CCS

Operating

Vattenfall Schwarze Pumpe
Germany - 30 MWth
Oxy - Lignite

AEP Mountaineer
USA - 58 MWth
Chilled Ammonia - Coal

EoN Karlshamn
Sweden - 5 MWth
Chilled Ammonia - Fuel

Total Lacq
France - 30 MWth
Oxy - Gas

Dow Chemical Co.
USA, West Virginia
Advanced Amines - Coal

Alstom BSF Windsor
US - 15 MWth
Oxy - Coals

Coming

EdF – Le Havre
France – 5 MWth Adv. Amines - Coal

Statoil Mongstad
Norway - 40 MWth
Chilled Ammonia - Gas

Pre-commercial

PGE Belchatow
Poland – 260 MWe
Adv. Amines - Lignite

Vattenfall Jänschwalde
Germany - 250 MWe
Oxy - Lignite

Transalta
Canada - >200 MWe
Chilled Ammonia - Coal

AEP Mountaineer
USA – 235MWe
Chilled Ammonia - Coal

Selected for receiving EEPR funding

Selected by Alberta and Federal Canadian funding

Selected by US DOE to receive CCPI Round 3 funding