

BG Group



Chris Cox, VP UK Upstream, BG Group

The UKCS business climate – is oil eclipsing gas?

Westminster Energy Forum, 27th November 2007



The UKCS – is oil eclipsing gas?

Context - international



- High oil prices – host governments in the driving seat
- IOC challenge – accessing new resource/retaining existing resource
- High commodity prices/BRIC phenomenon affecting project economics
- Gas more strategic than before, more flexible fuel – thanks to LNG



BG Group's LNG liquefaction plant, Idku, Egypt

Cyclical shift in the balance of the industry?

The UKCS – is oil eclipsing gas?

Context - domestic



- UK in vanguard of fight to combat climate change but...
- ...tension between climate change measures and security of energy supply?
- Ambitious targets for low/no carbon fuels
 - 20% of energy (not power!) from renewables by 2020
 - At least 60% reduction in CO2 emissions by 2050



The BG Group operated Armada platform

Is natural gas the security of supply 'safety net'?

UK energy-mix

How rapid a move to low/no-carbon?



UK Primary Energy Mix	Now	2020
Oil & Gas	74 %	79 %
Renewables	~ 2%	~ 4-5%
Nuclear	~ 8 %	~ 3 %
Coal	16 %	14 %

Source: DTI Energy White Paper

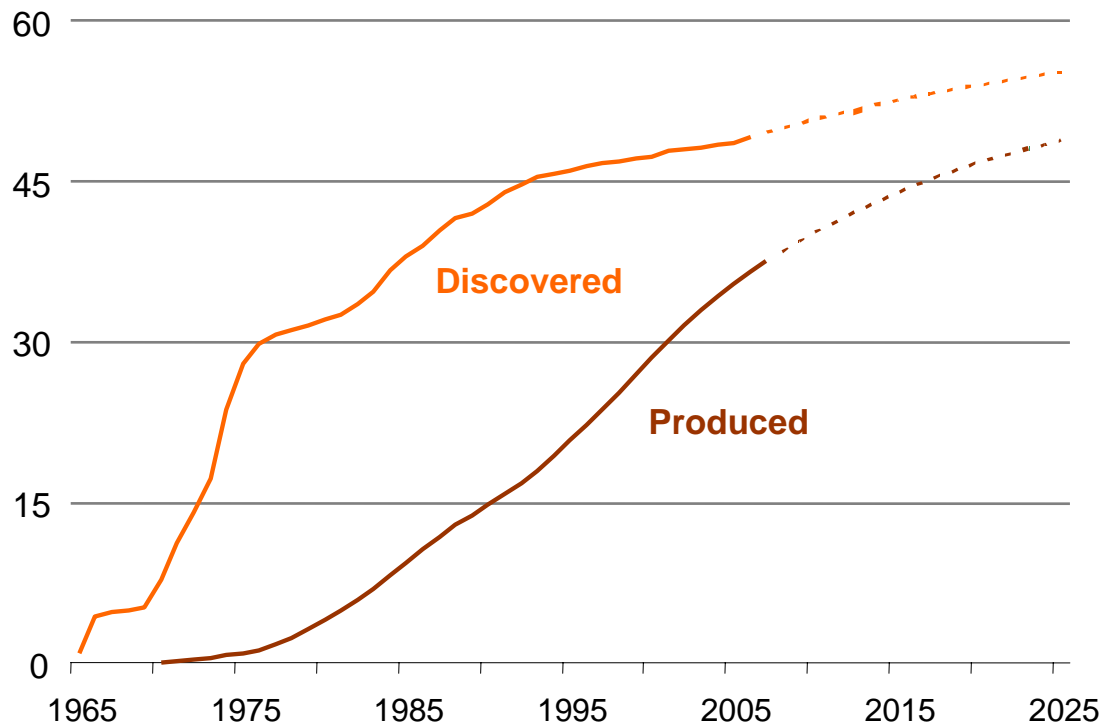
Reliance on oil and gas may increase

UKCS potential

Significant recoverable reserves



UKCS discoveries and production (cumulative)
(billion boe)



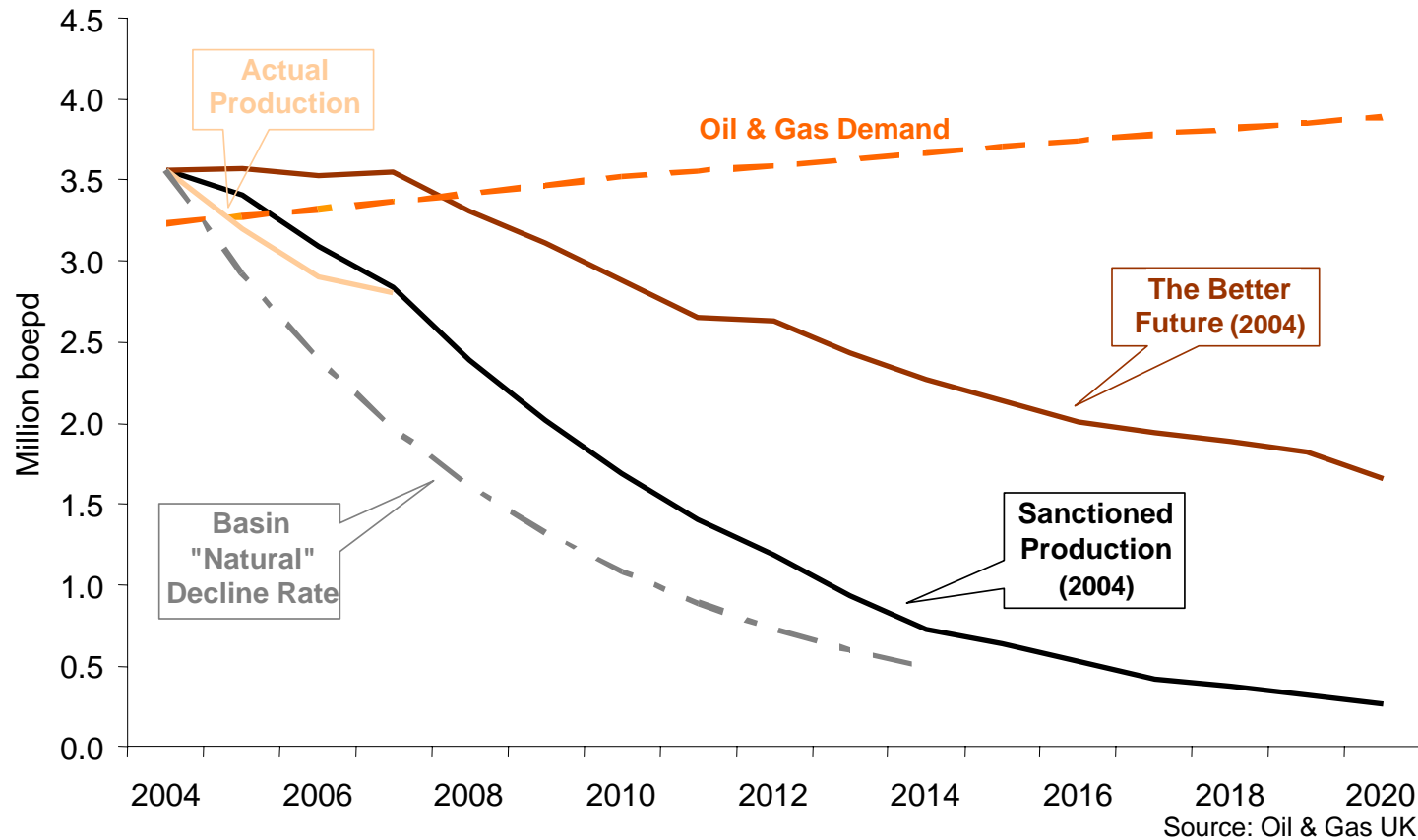
UKCS Recoverable Reserves/Resources (including yet to find)	
Produced	36.5 bln boe
Still to come	12 bln boe (low)
	22 bln boe (central)
	39 bln boe (high)

Source: BERR Oct '07

'Game over' perception prevalent in UK...but misguided

UKCS performance

Struggling to meet optimal output



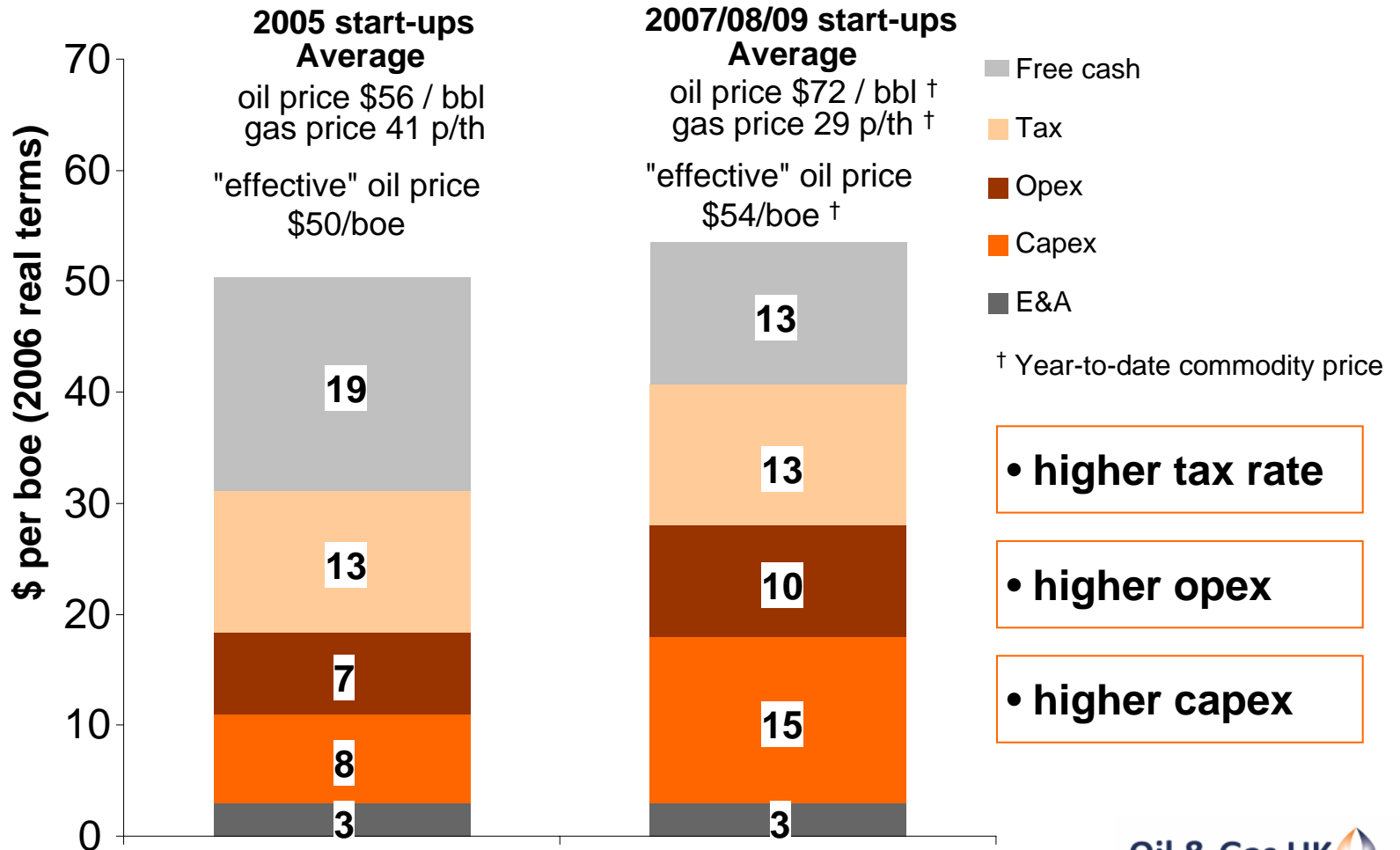
How can we do better?

UKCS performance

The challenges



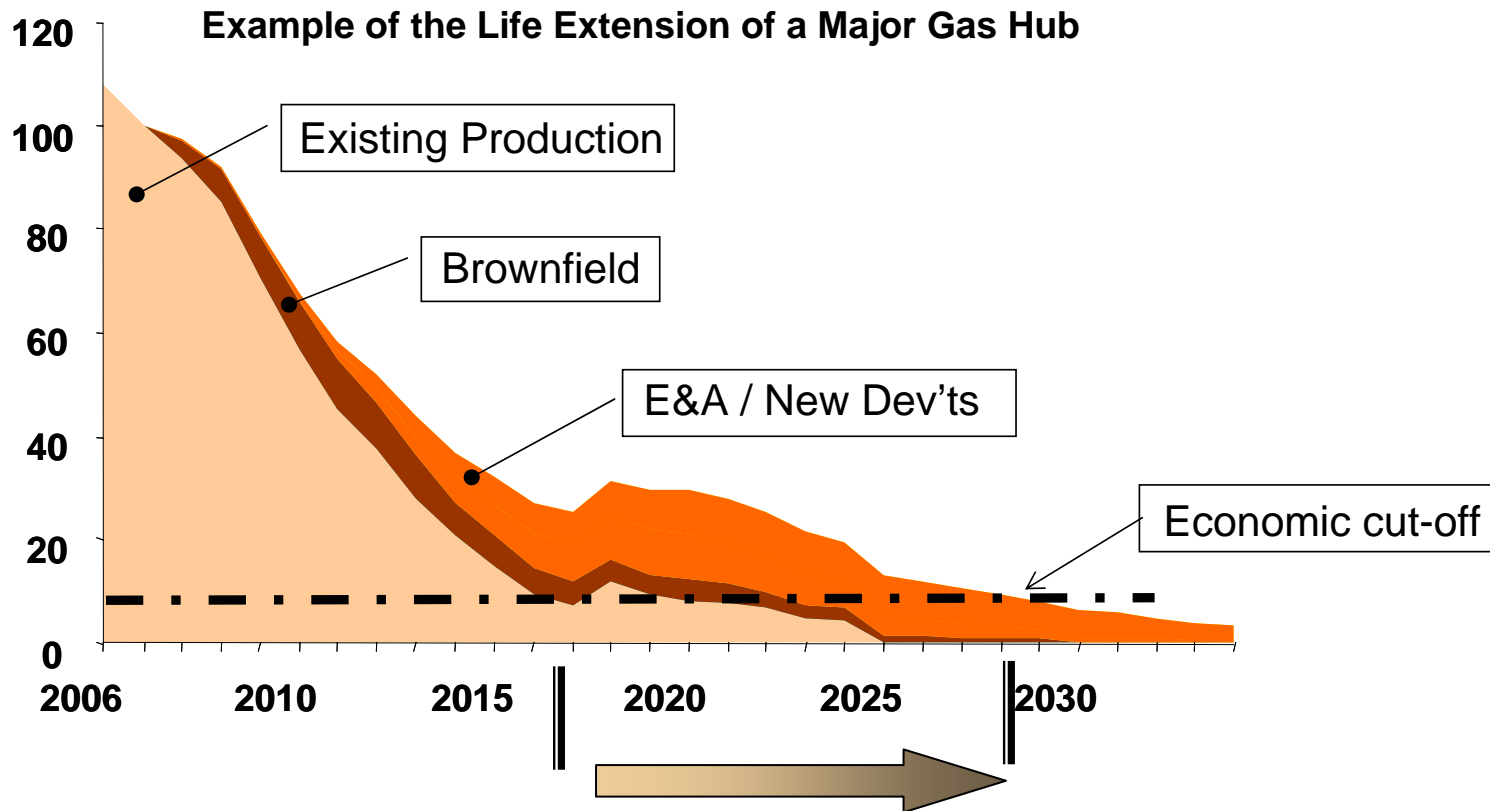
- New investments struggling to compete
- Future investment under pressure



The margin for developers continues to fall

UKCS performance

Threat from decommissioning



- 45% of infrastructure decommissioned by 2020 if activity levels fall
- New developments could delay decommissioning by 10-15 years in many existing systems

Maximum UKCS recovery at risk from early abandonment

UK energy-mix

UK Continental Shelf - the challenges



- High oil prices boosted activity till...
- ...commodity prices, support service costs, rig-rates rocketed
- Capex for 2007 down on 2006
- Developments being cancelled and staff laid off



\$90 oil failing to maximise UKCS production

UK energy-mix

The contribution of gas to UK security of energy supply

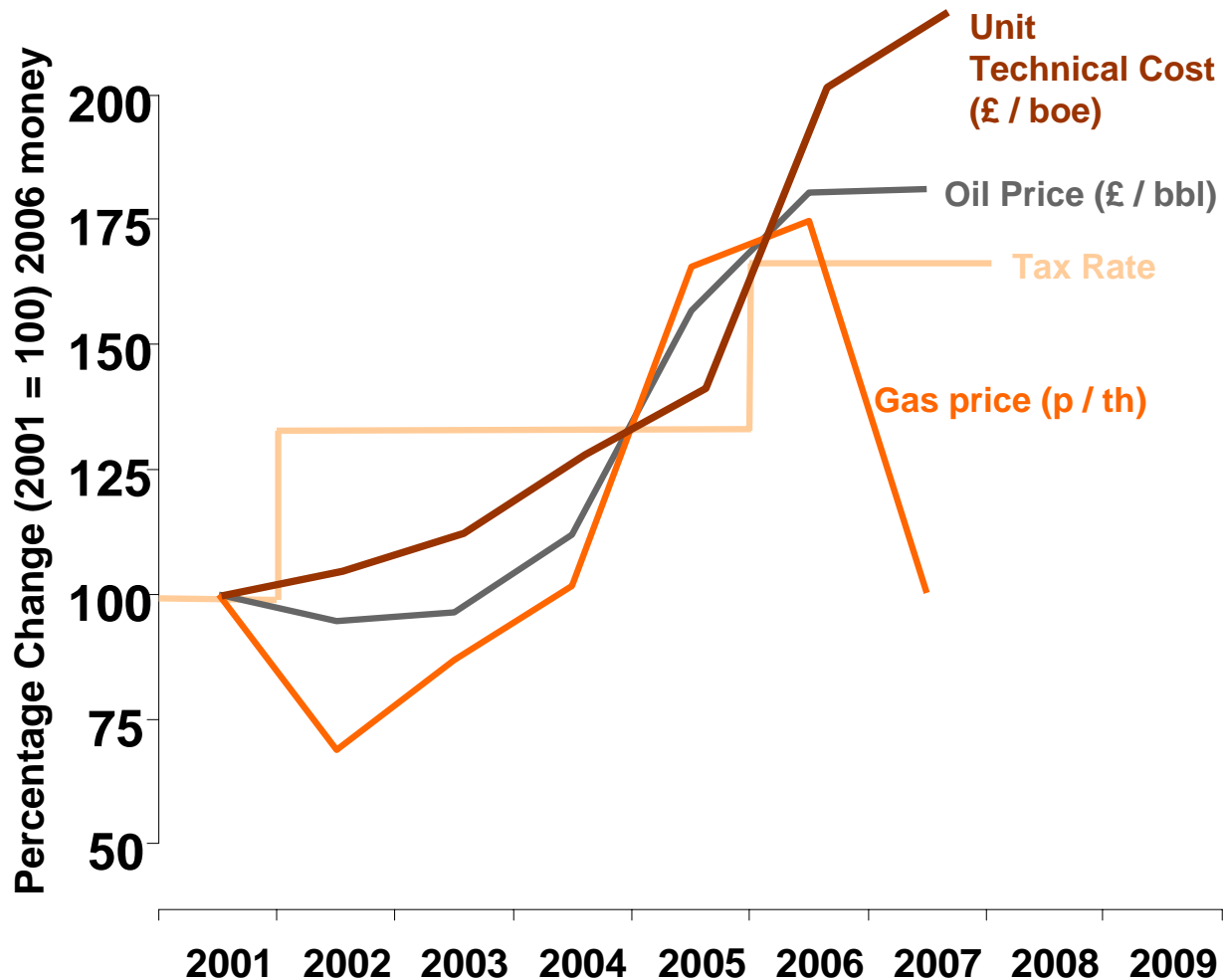
- Position of gas critical in UK energy-mix during transition phase to low/no carbon future
- Supplementary corporation tax (SCT) introduced when oil and gas were enjoying high margins
- Recent 'dislocation' of oil and gas-prices
- Lower revenues from gas...



...so new gas developments hardest hit

Current Business Dynamics: Costs

- Growing evidence of gas discoveries not being developed
- High risk, high reward challenge of HPHT
- 'Mature' UKCS fighting for capex v lower cost basins



Gas-price dislocation *vis-à-vis* oil-price and tax

UK energy mix

How do we maximise gas production?

Options include:

- Easing SCT on new developments...
- ...or new gas developments
- Make marginal finds commercial *via* volume allowance
- Exempt HPHT fields from SCT



HM Treasury and DBERR now engaged in production challenge

Conclusions

- Gas can fill the security of energy supply 'gap'
 - Much still to play for in UKCS
 - But investment climate has deteriorated
 - Action needed to ensure oil and gas production maximised
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