

**Trying to Reconcile Production  
and Conversion Factors  
Presentation to EAG  
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# Production Reporting Units (1)

- Oil and NGLs

- Mass

- Tonnes

- Volume

- Barrels (per day)
    - Cubic metres

- Issue

- Stabilised or Pipeline Crude?
    - 1 tonne of oil does ***not*** = 1 tonne of oil equivalent!

# Oil Conversion Factors

- 1 tonne of crude oil ~ 7.5 barrels
- 1 tonne of condensate ~ 8.5 barrels
  - 1 tonne of UKCS “oil” ~ 7.55 barrels
- 1 tonne of NGLs ~ 11.5 barrels
  - 1 tonne of UKCS “oil/NGL” ~ 7.8 barrels

# Production Reporting Units (2)

- Gas

- Energy

- GWh (also TWh/kWh: Giga =  $10^9$ , Tera =  $10^{12}$ , kilo =  $10^3$ )
    - Therms

- Volume (at standard temperature and pressure)

- Cubic metres (per day)
    - Cubic feet (per day)

- Mass

- Tonnes

- Issue

- Are NGLs included (in associated gas)?

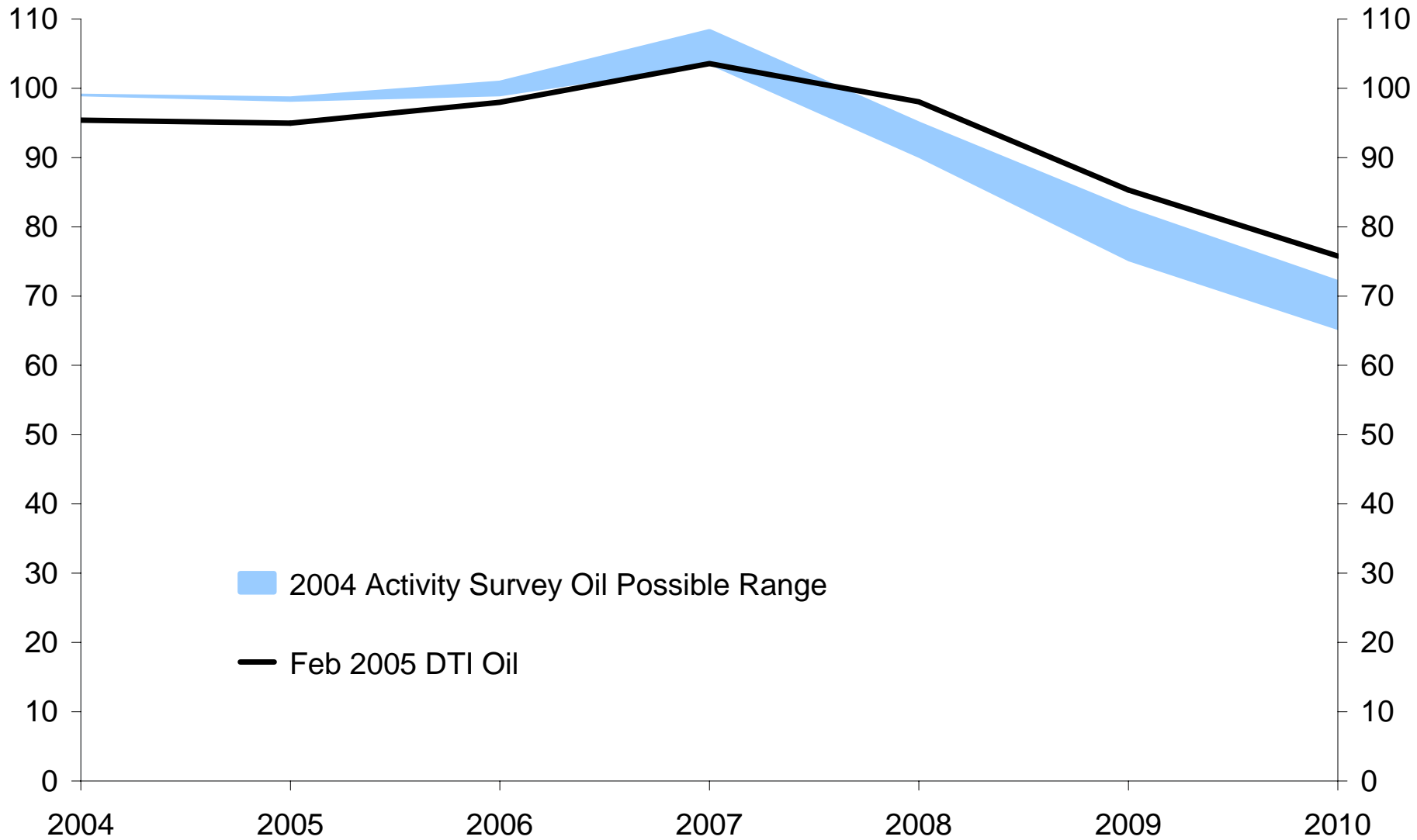
# Gas Conversion Factors

- 1 GWh = 0.0341214 million therms
  - 1 million therms = 29.3071 GWh
- 1 cubic metre of gas ~ 0.36 therms
  - 1 billion cubic metres ~ 10,900 GWh
- 1 cubic metre of gas = 35.315 cubic feet
- 1 tonne of oil equivalent (toe) = 0.01163 GWh
  - 1 toe ~ 396.83 therms
  - 1 billion cubic metres of gas ~ 0.92 million toe
    - how to go from toe to boe?
      - ~ 151 cubic metres of gas ~ 1 boe
      - ~ 5,346 cubic feet of gas ~ 1 boe
- EAG has previously assumed 1 boe = 5,800 scf
  - is this too high?

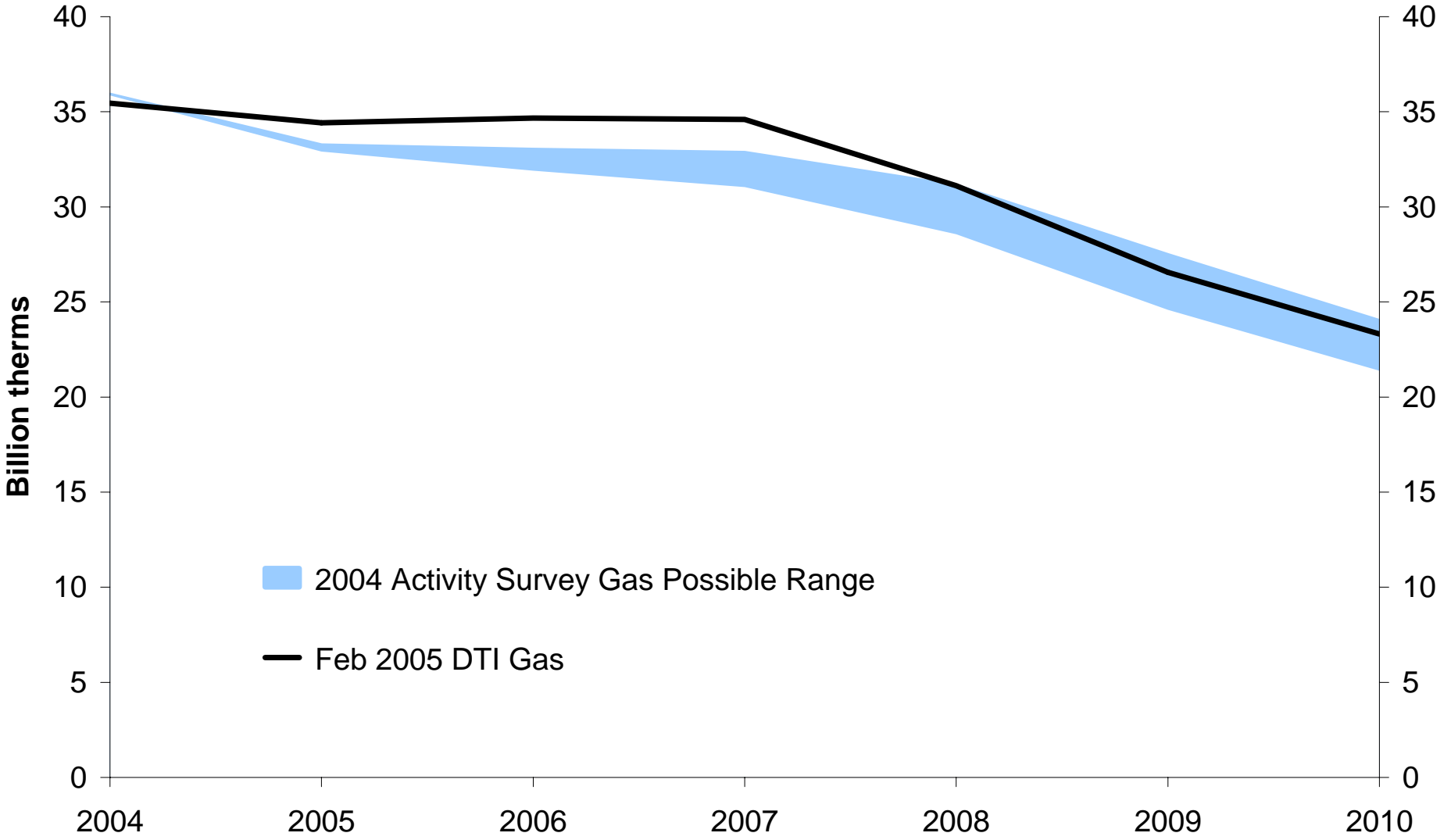
# DTI Data on 2004 Production

- Oil: 95.443 million tonnes
  - of which:
    - crude oil 87.585 million tonnes
    - NGLs 7.858 million tonnes
    - ~ 2.06 million boe/day
- Gas: 1,038,845 GWh
  - 1,115,537 GWh gross production
  - 76,692 GWh producers' own use
  - ~ 95 bcm
  - ~ 1.73 million boe/day

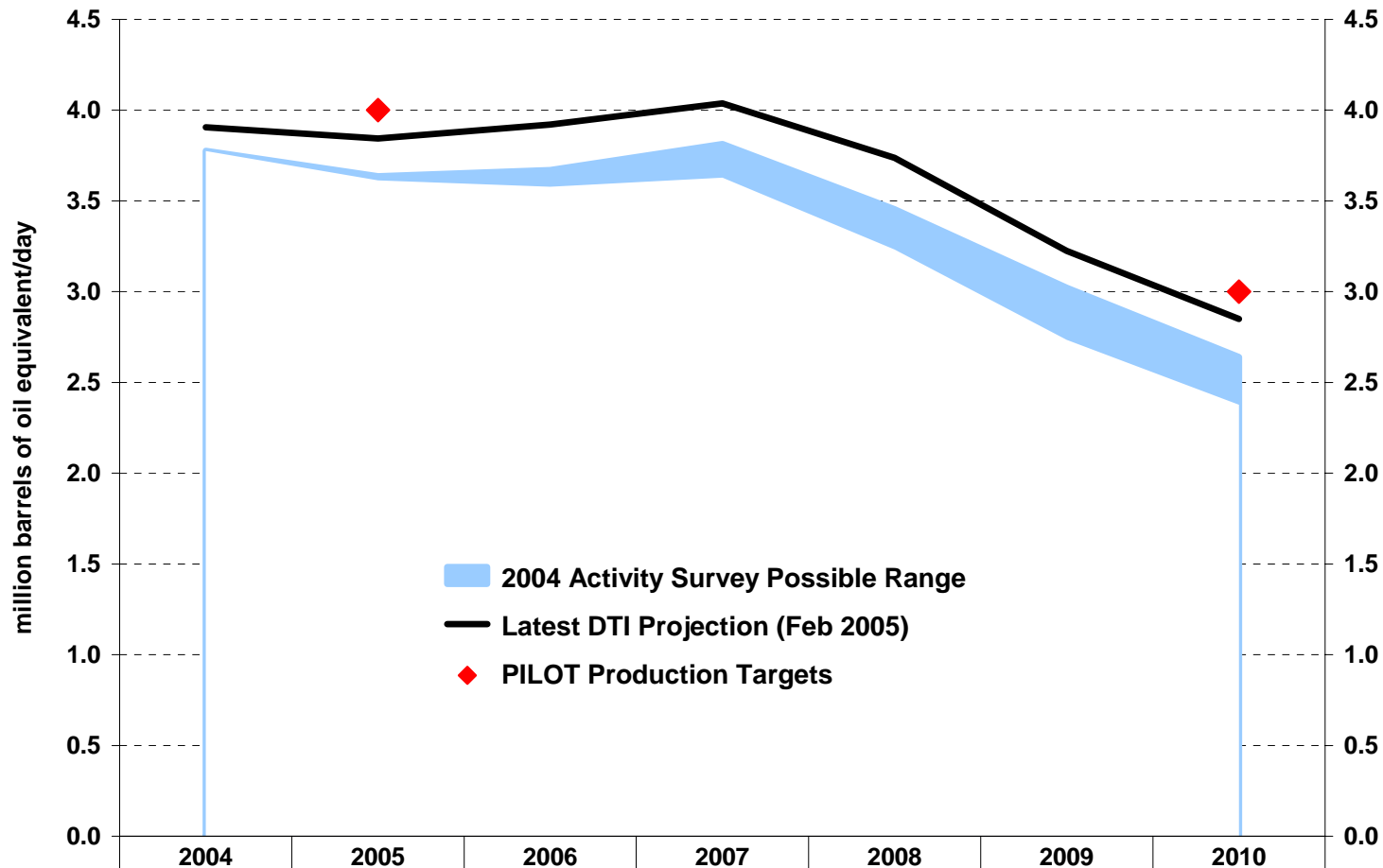
# Comparison of latest DTI and Activity Survey UKCS Oil Projections



# Comparison of latest DTI and Activity Survey UKCS Gas Projections



# Projected UKCS Oil and Gas Production and PILOT Targets



	2004	2005	2006	2007	2008	2009	2010
2004 Activity Survey Possible Range	3.8	3.6	3.7	3.8	3.5	3.0	2.6
2004 Activity Survey Probable Production	3.8	3.6	3.6	3.6	3.2	2.7	2.4
Latest DTI Projection (Feb 2005)	3.9	3.8	3.9	4.0	3.7	3.2	2.9
PILOT Production Targets		4.0					3.0