

# Revitalising the UKCS: Can Vision 2035 Become a Reality?

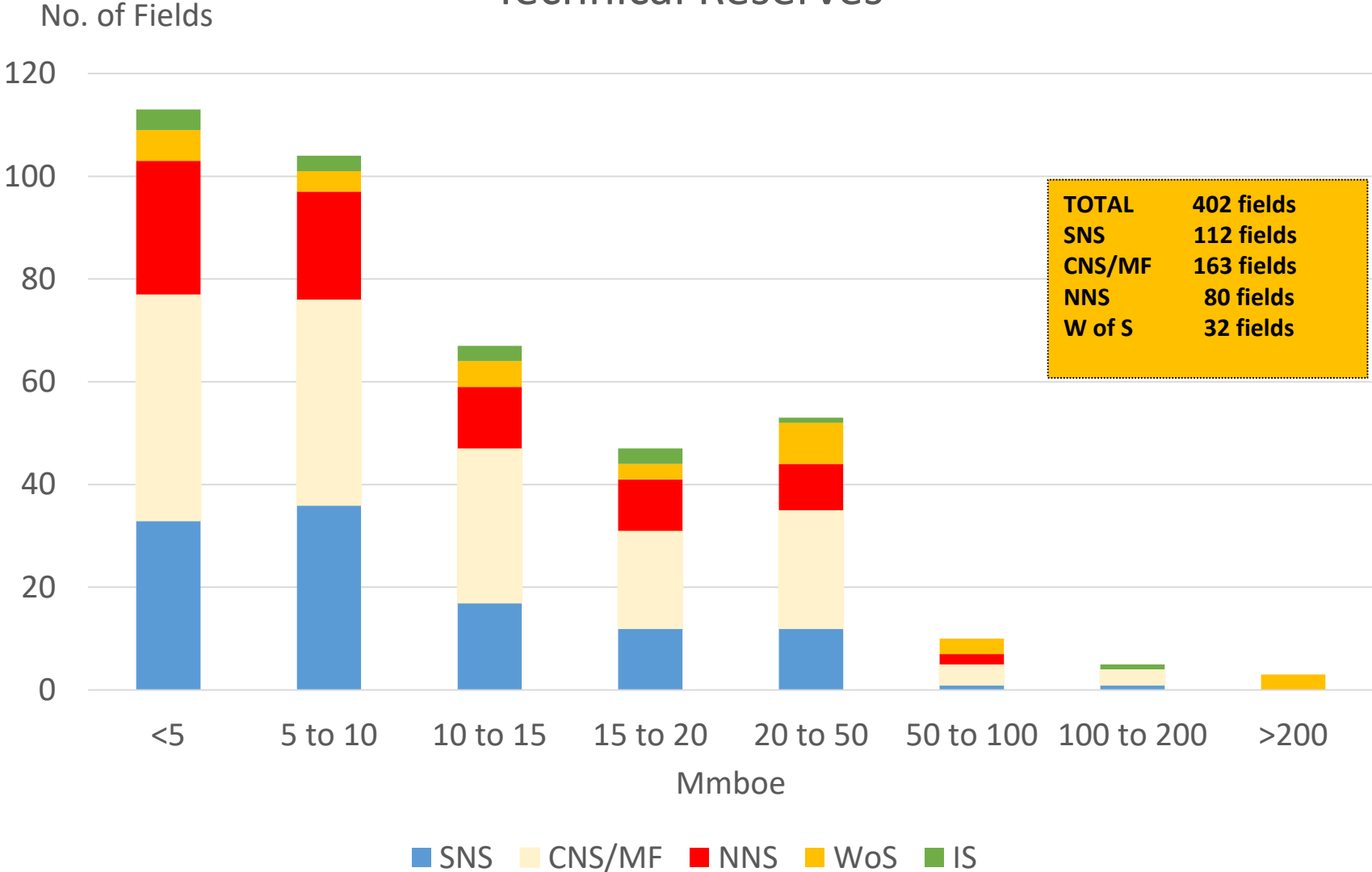
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and  
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Large field-based financial simulation model incorporating Monte Carlo technique for risk analysis.

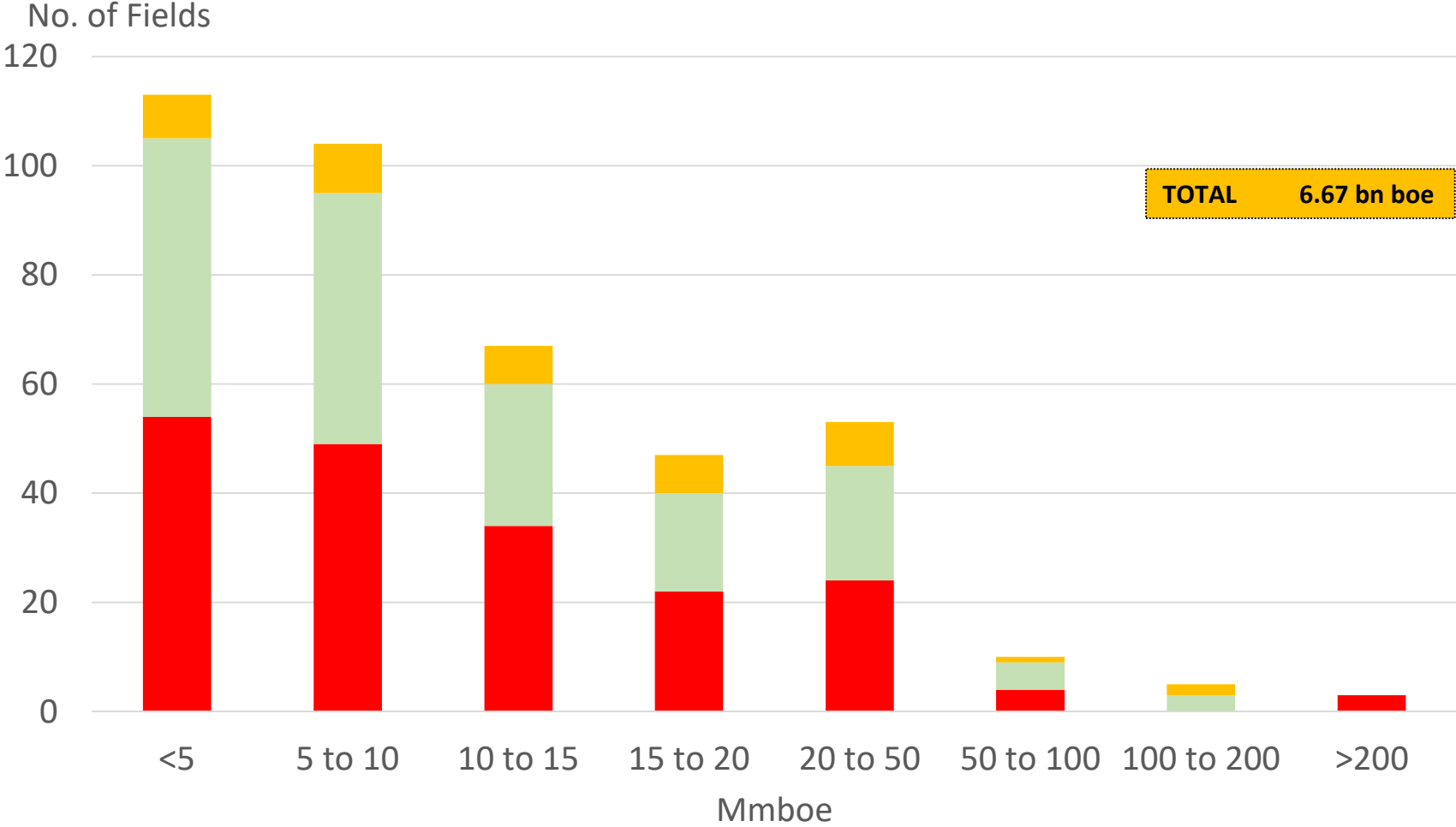
Large field database:

(i) Sanctioned fields	400
(ii) Incremental projects	90
(iii) Probable fields	14
(iv) Possible fields	5
(v) Technical Reserves	402 = i.e. Marginal fields

# Technical Reserves



# Technical Reserves



Oil Fields Gas Fields Condensate Fields

## Investment Screening Prices

Oil Price (real) \$/bbl	Gas Price (real) P/therm
60	55
70	60

## Total Number of Discoveries to 2045

Medium effort/Lower Success Rate	137
Low Effort/Medium Success Rate	112

## Current Tax System

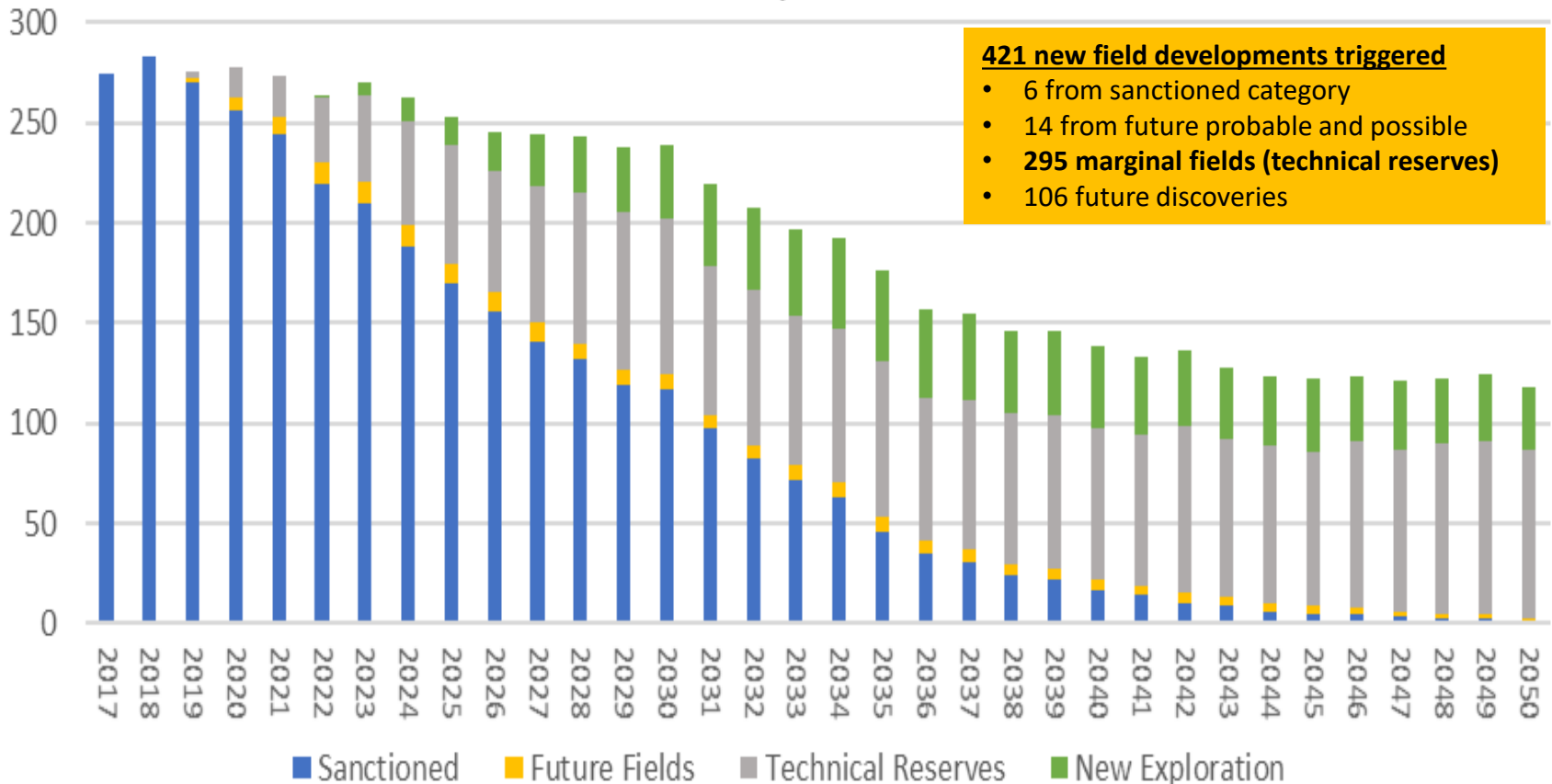
1. Tax on Income = CT + SC  
= 0.3 + 0.1  
= 40%
2. Tax Relief on Investment = CT + SC + IA (SC)  
= 0.3 + 0.1 + 0.625 (0.1)  
= 46.25%

## Investment Hurdle Criteria

NPV (post tax) / I (pre tax)  $\geq$  0.3 and NPV / I  $\geq$  0.5  
with discount rate  
of 10% in real terms

# Number of Fields in Production \$60/bbl and 55p/therm

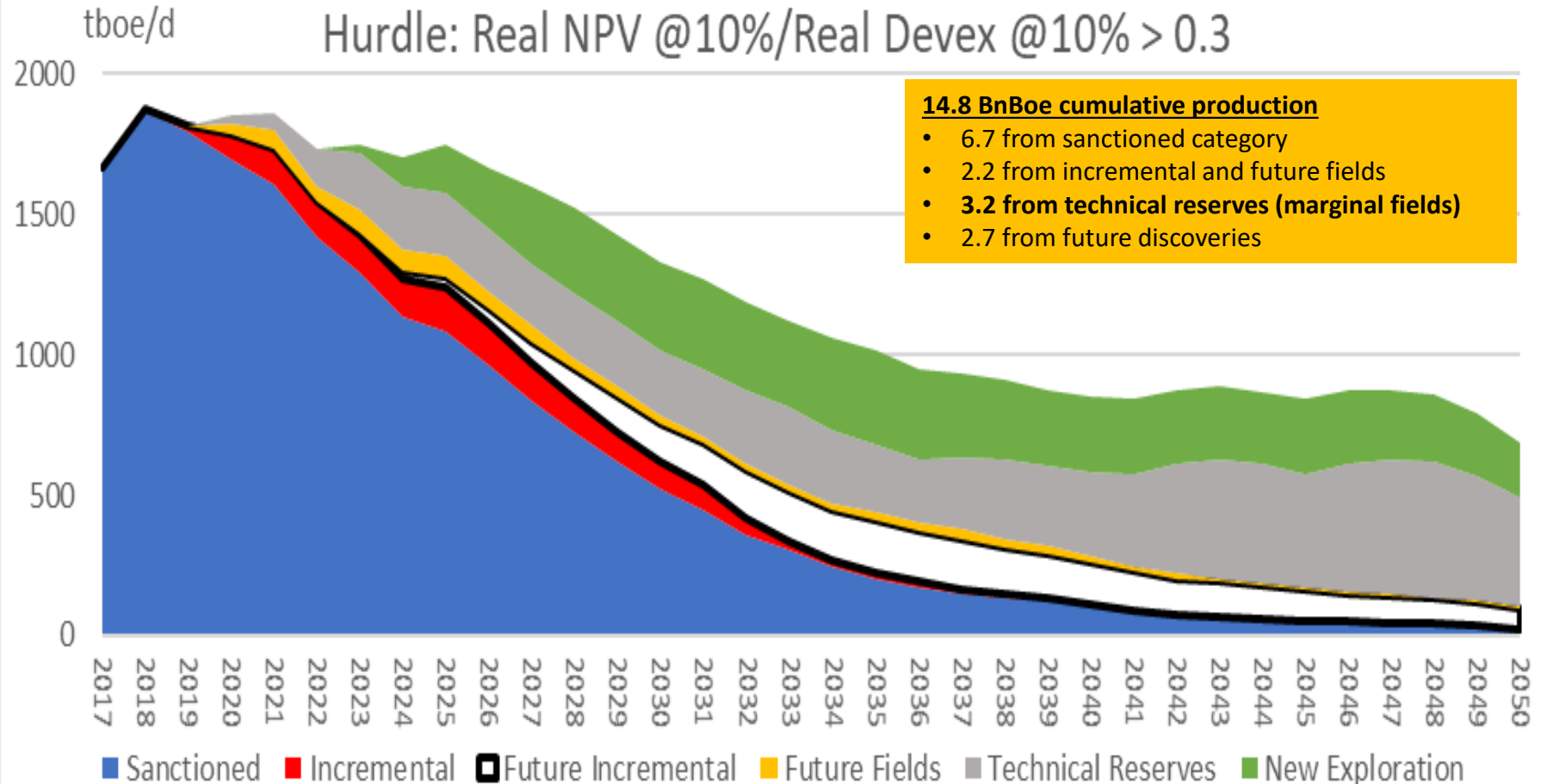
No. of Fields Hurdle: Real NPV @10%/Real Devex @10% > 0.3



# Potential Total Hydrocarbon Production

## \$60/bbl and 55p/therm

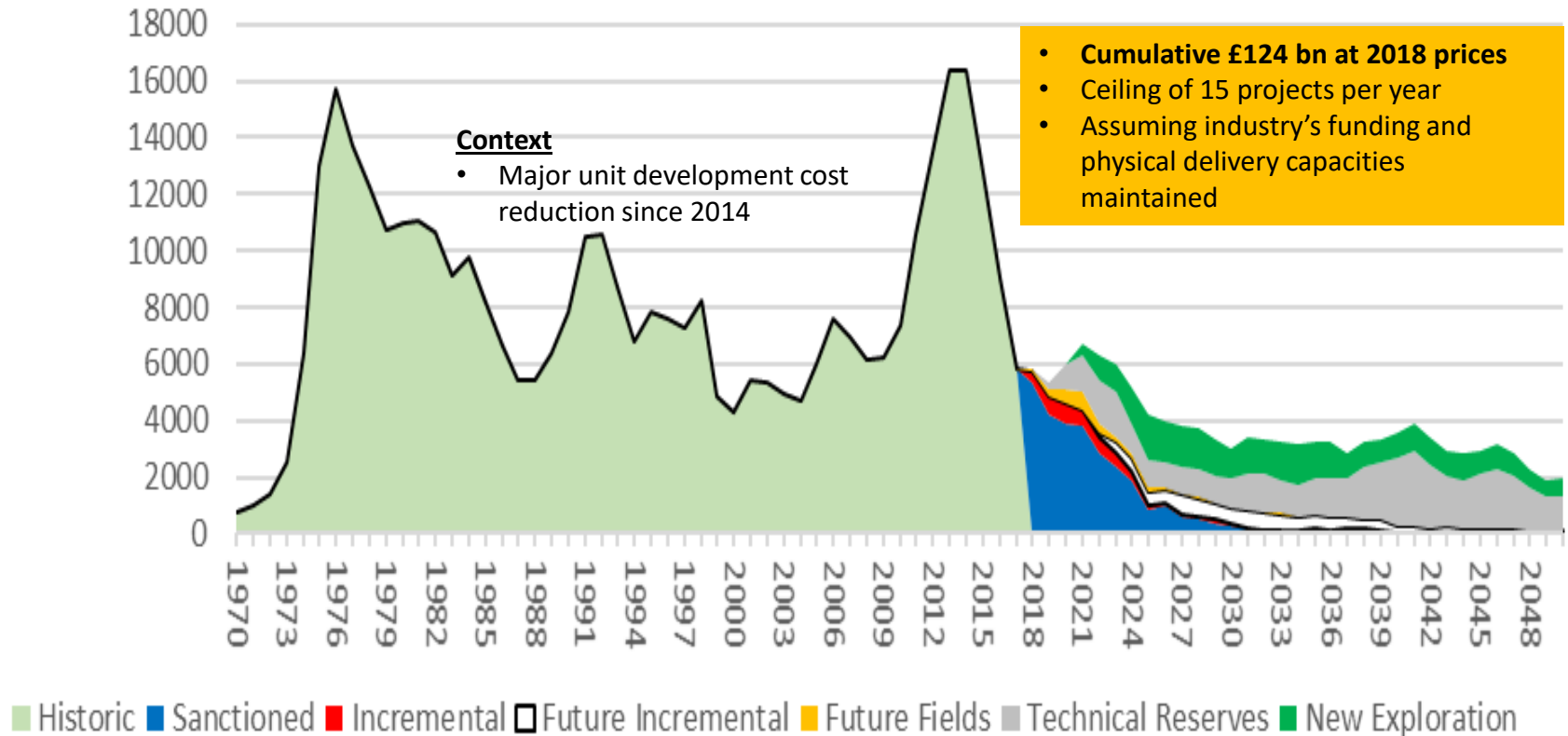
Hurdle: Real NPV @10%/Real Devex @10% > 0.3



# Potential Development Expenditure

## \$60/bbl and 55p/therm

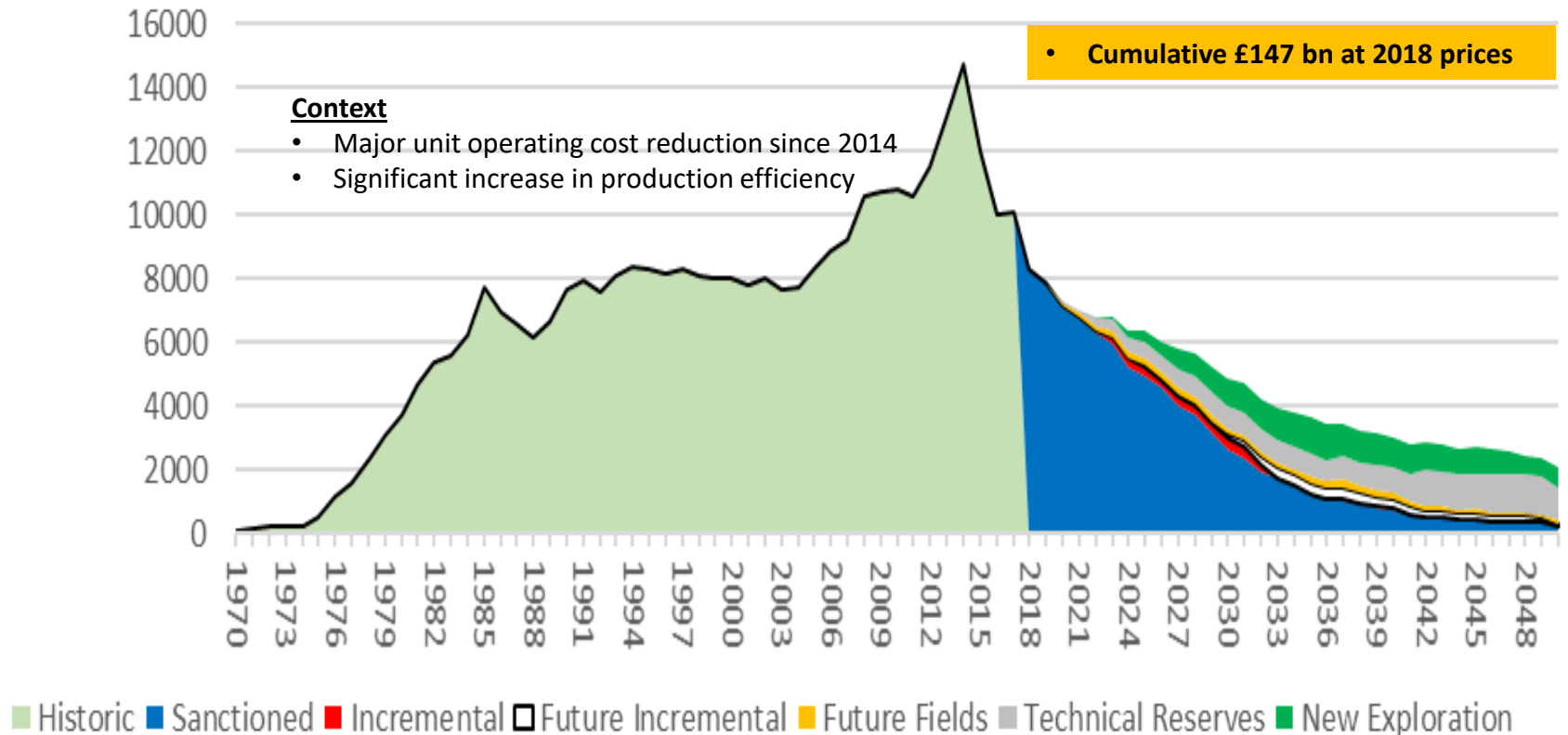
£m (2018) Hurdle : Real NPV @ 10% / Real Devex @ 10% > 0.3





# Potential Operating Expenditure \$60/bbl and 55p/therm

£m (2018) Hurdle : Real NPV @ 10% / Real Devex @ 10% > 0.3

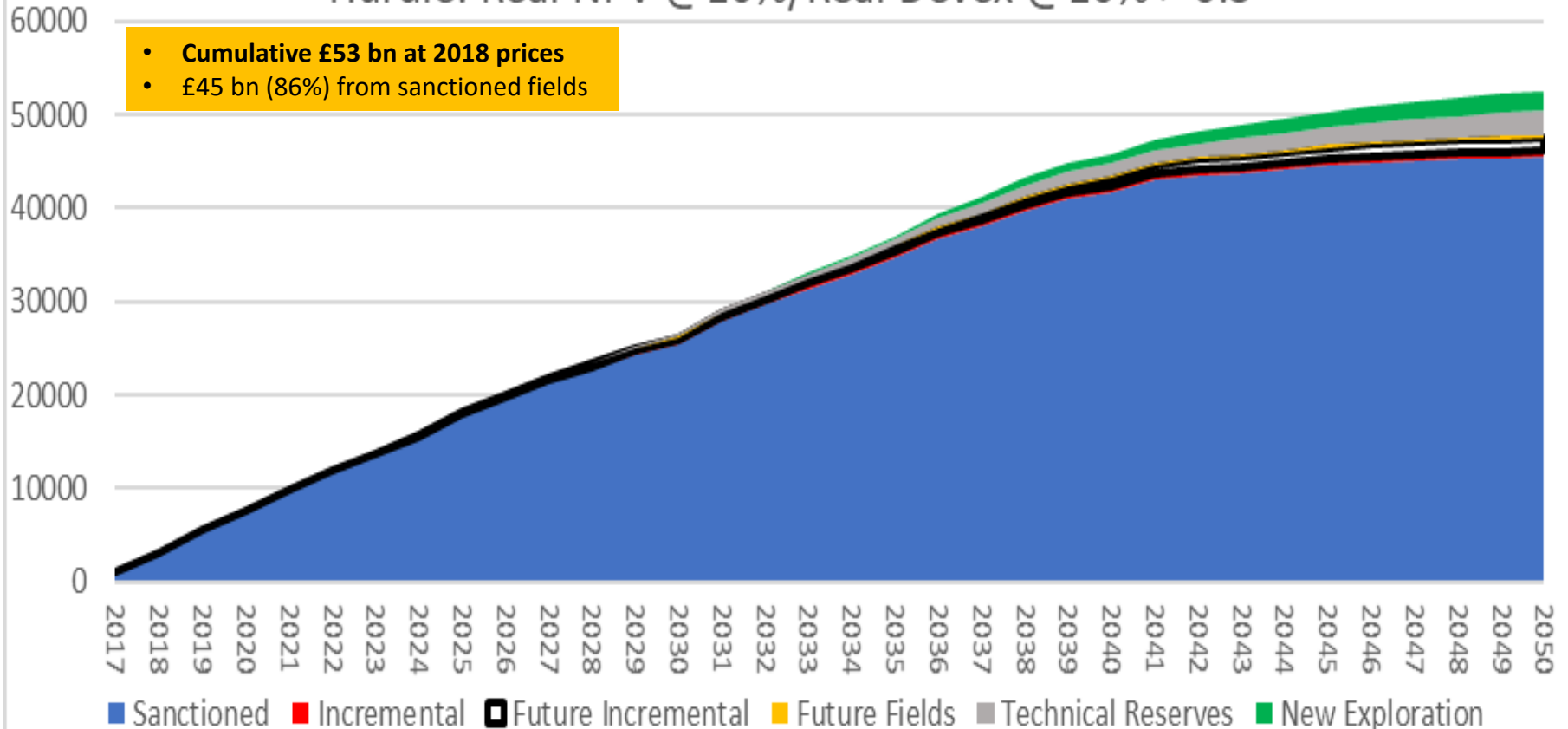


# Potential Cumulative Decommissioning Expenditure

## \$60/bbl and 55p/therm

Hurdle: Real NPV @10%/Real Devex @10% > 0.3

£m (2018)



# Conclusions

- Reassessment of UKCS long-term prospects due to:
  - Painfully realised cost reductions since 2014
  - Improved production efficiency
  - Increase in oil and gas prices since the downturn
- At \$60/bbl and 55p/th prices, OGA's Vision 2035 could be realised
  - Cumulative 2018-2050 production 14.8 Bn Boe
  - Based on successful development of nearly 300 marginal fields
  - Assuming delivery capacity of the supply chain maintained at current level
  - Assuming utilisation and continued development of common infrastructure

# Further details:

An Economic Reassessment of the Long term Prospects for the UKCS: Can Vision 2035 Become a Reality?, North Sea Study Occasional Paper, No. 143, University of Aberdeen Business School, October 2018, pp.73,

<http://www.abdn.ac.uk/research/acreef/working-papers/>