

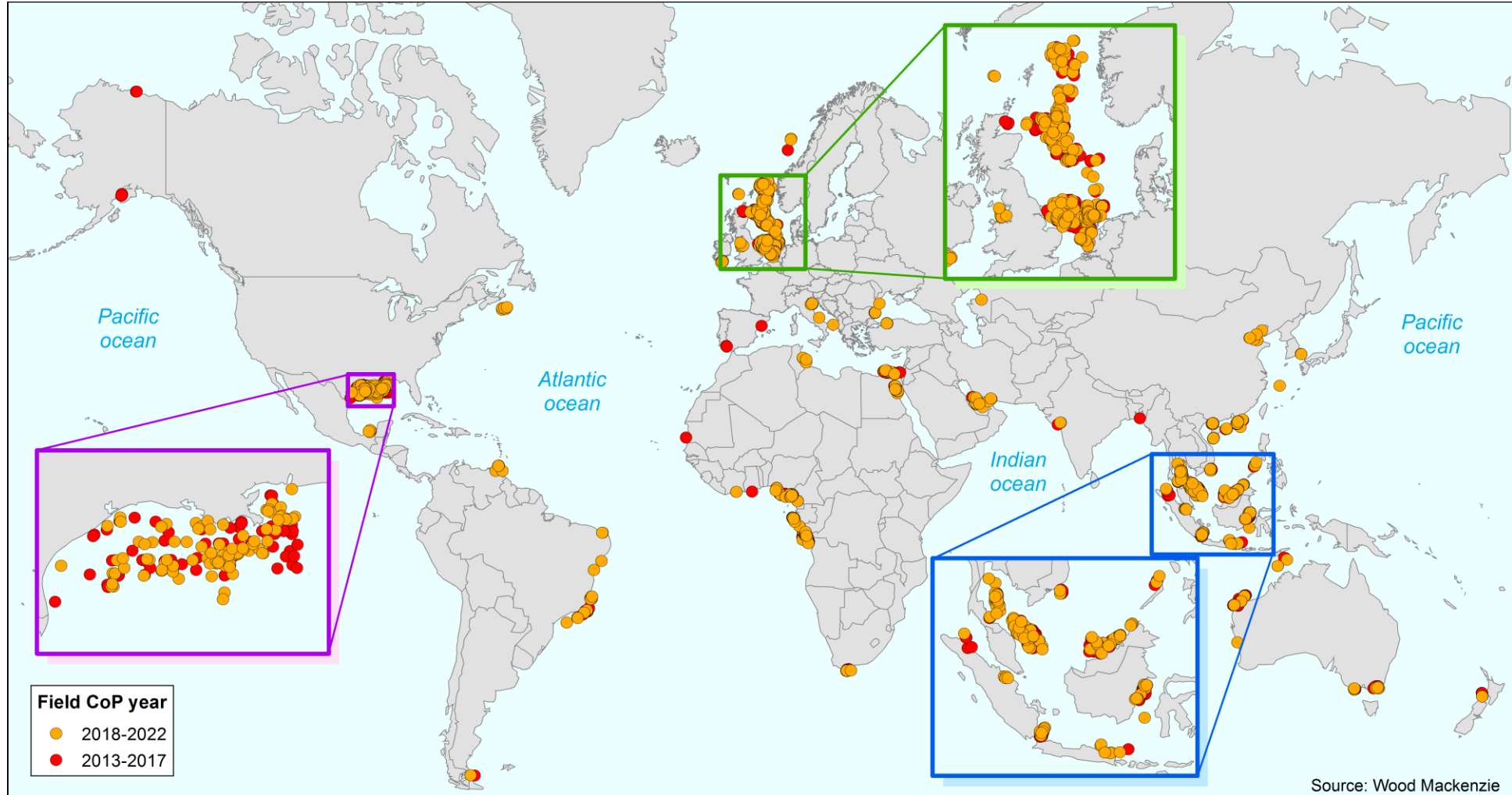
UKCS Decommissioning market overview

Neivan Boroujerdi, SPE conference, December 2018



Have many fields have ceased globally and what is the outlook?

Around 300 fields ceased production over the last five years, activity was focused in the North Sea, Gulf of Mexico and Asia Pacific

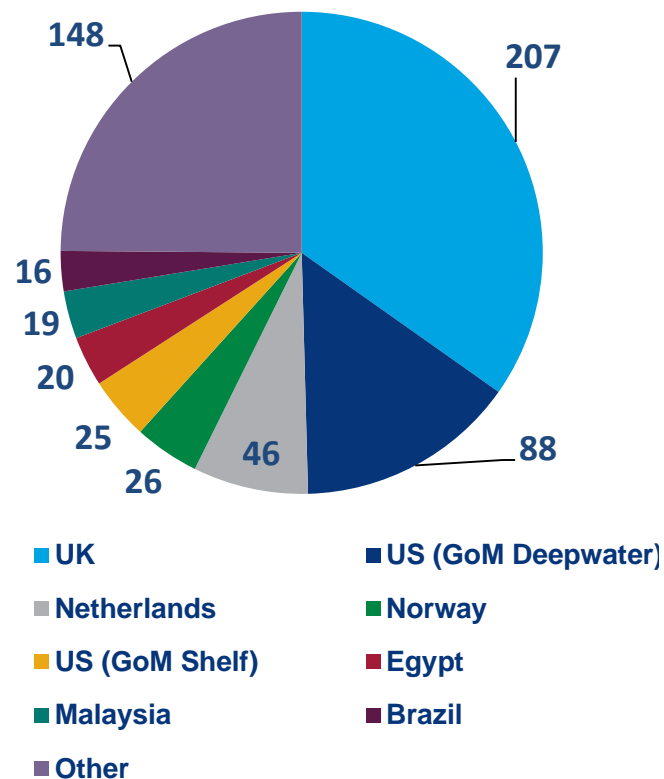




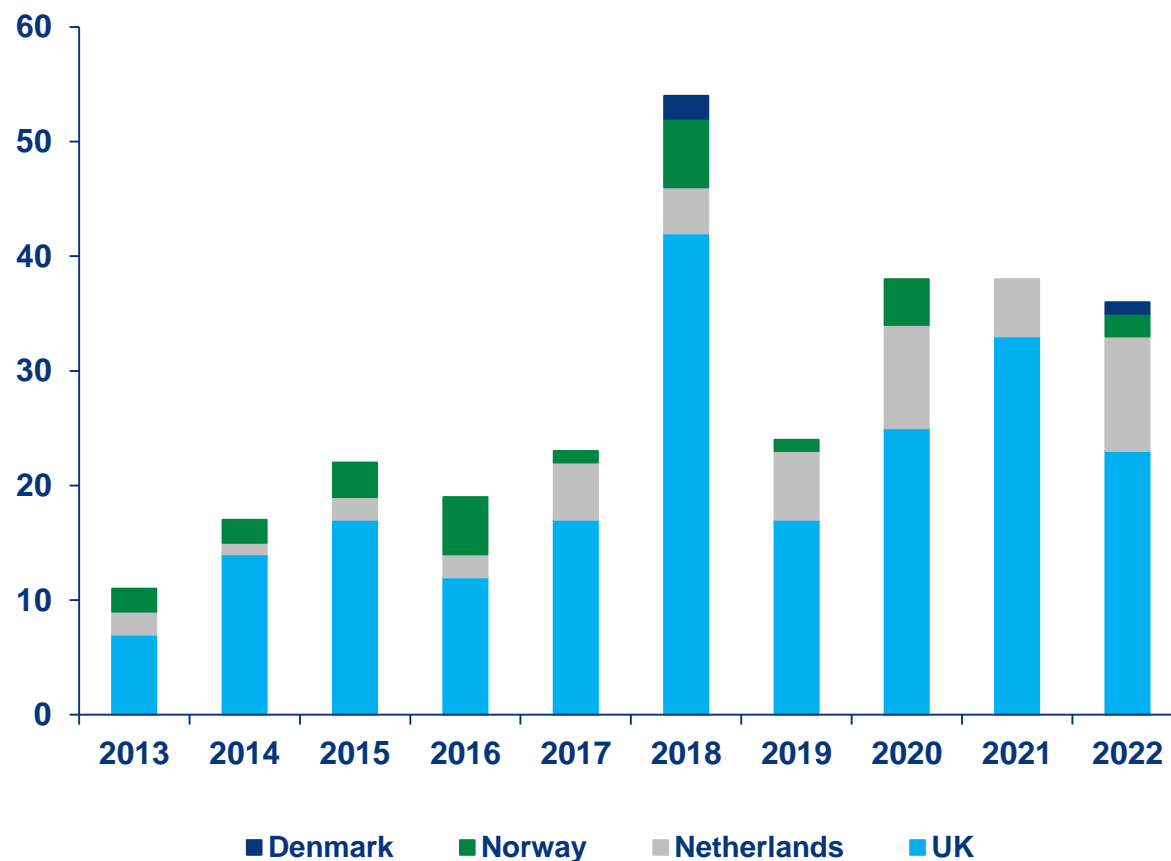
The UKCS has the highest number field cessations globally to 2022

Over 30% of offshore field cessations are in the UKCS between 2013-2022

2013-2022 Cessations by country



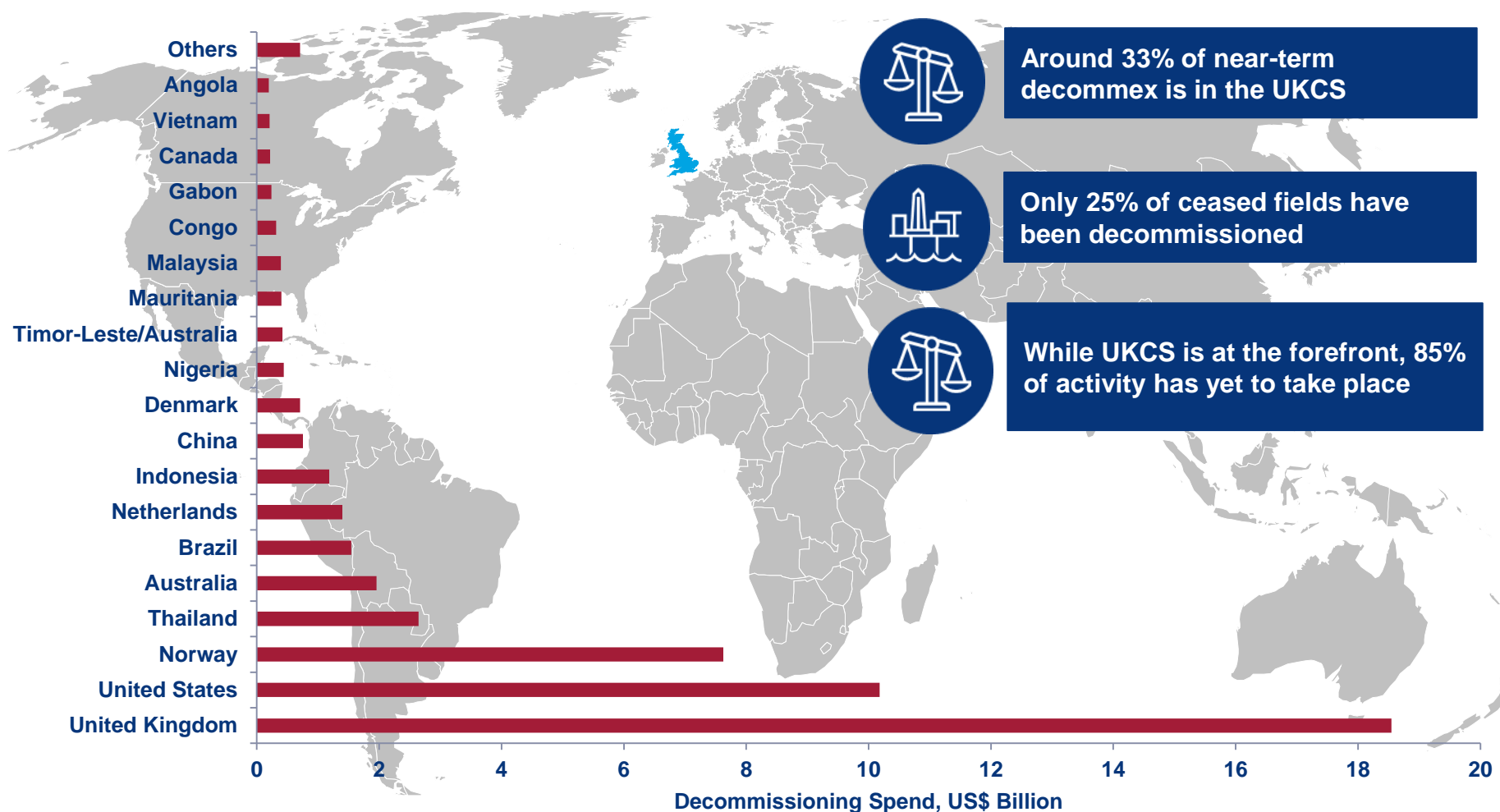
2013-2022 North Sea field cessations



The UKCS is at the forefront of global decommissioning

Near term decommissioning spend in the mature UKCS is higher vs. the rest of the world

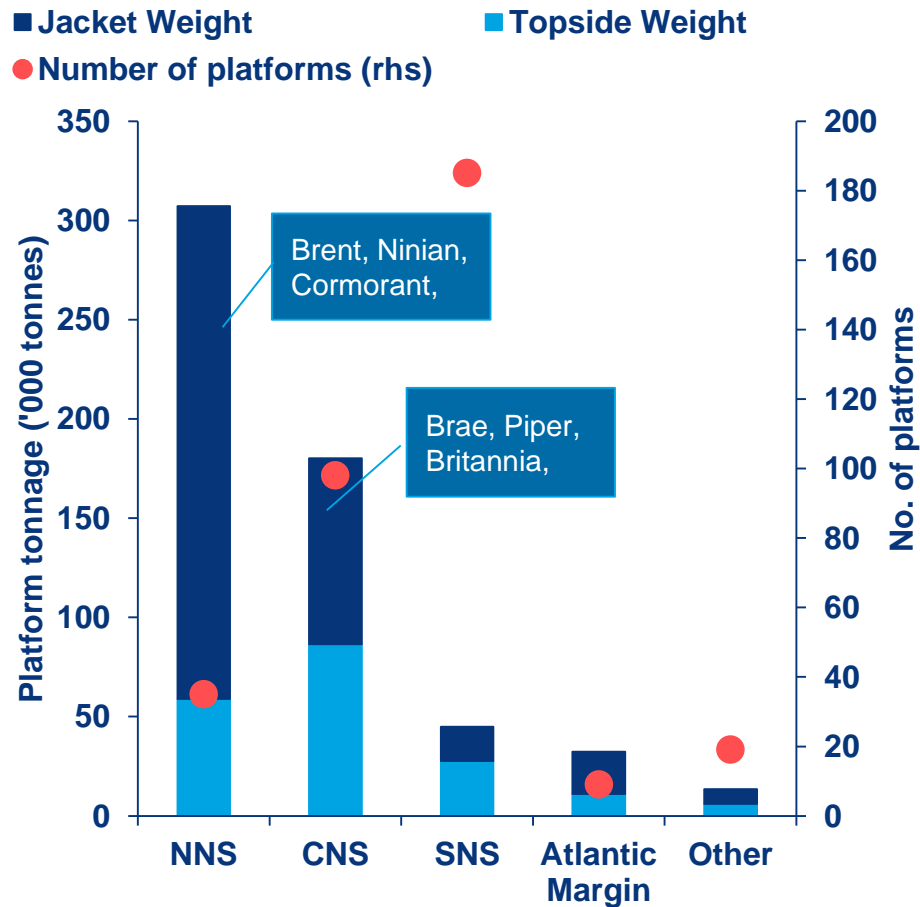
Total decommissioning spend by country 2013-2022



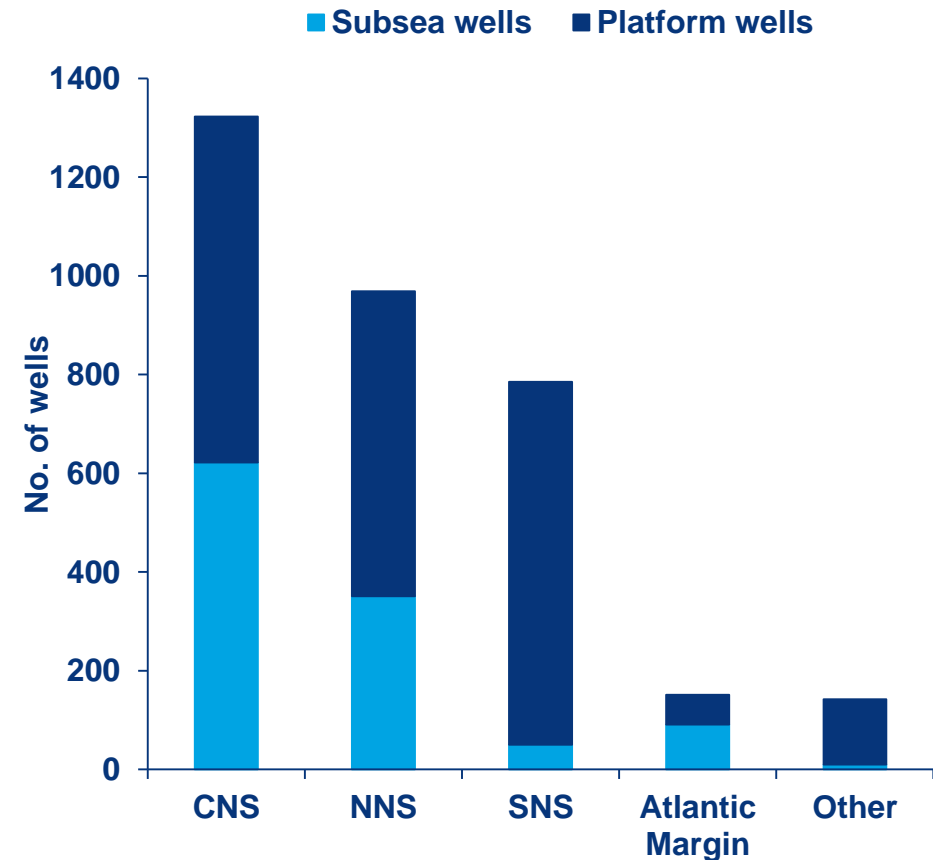
There are around 350 platforms and 3,000 wells to decommission

About 50% of the market is well P&A, with platforms making up 25%...

Platforms by sector



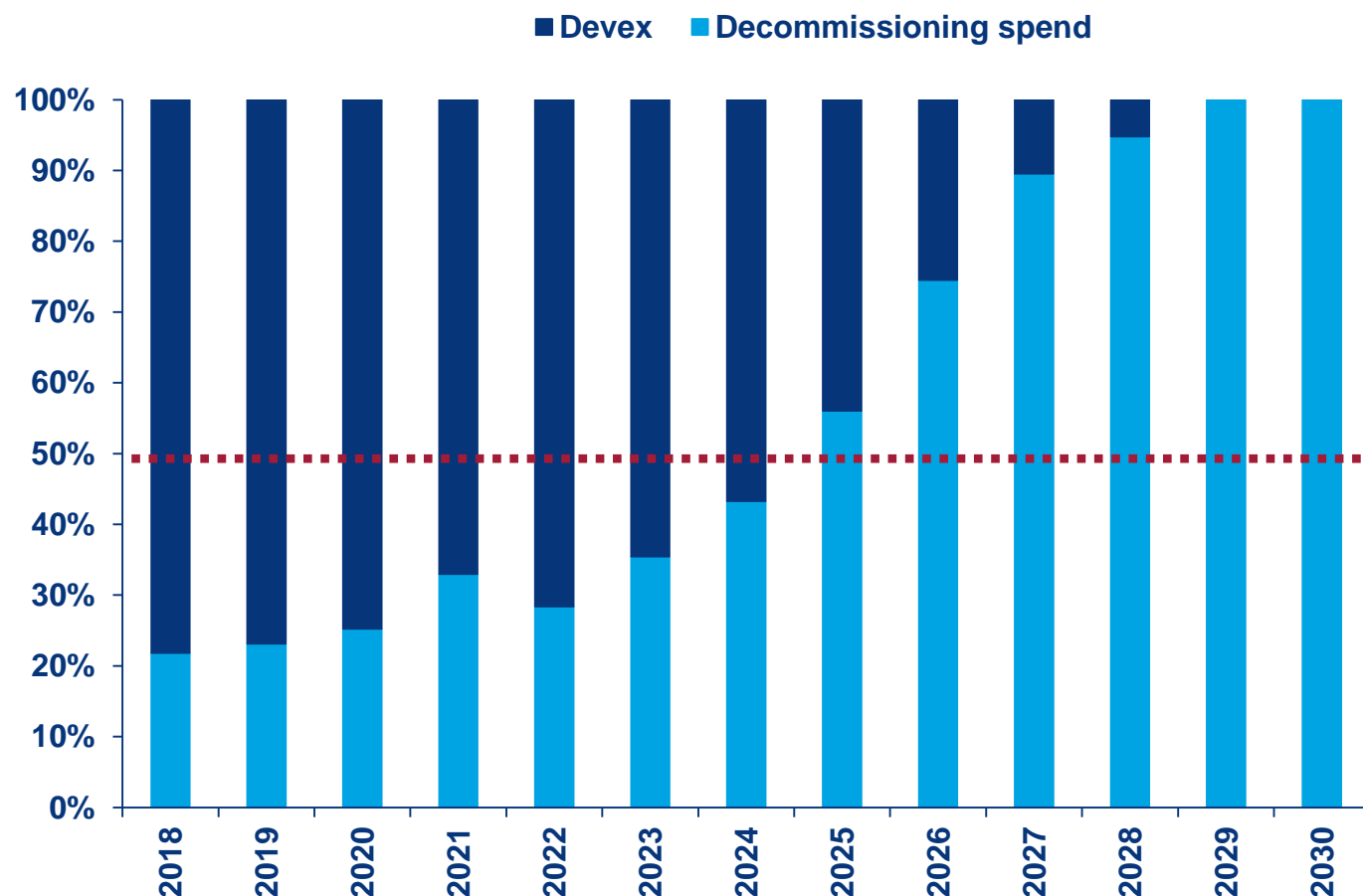
Wells by sector



Without new investment decommissioning will overtake development spend in 2025

Decommex falls just short of new investment between now and 2030 (US\$40 billion v US\$44 billion)

2018-2030 Decommissioning vs development spend



Challenges

Project gap

Low exploration

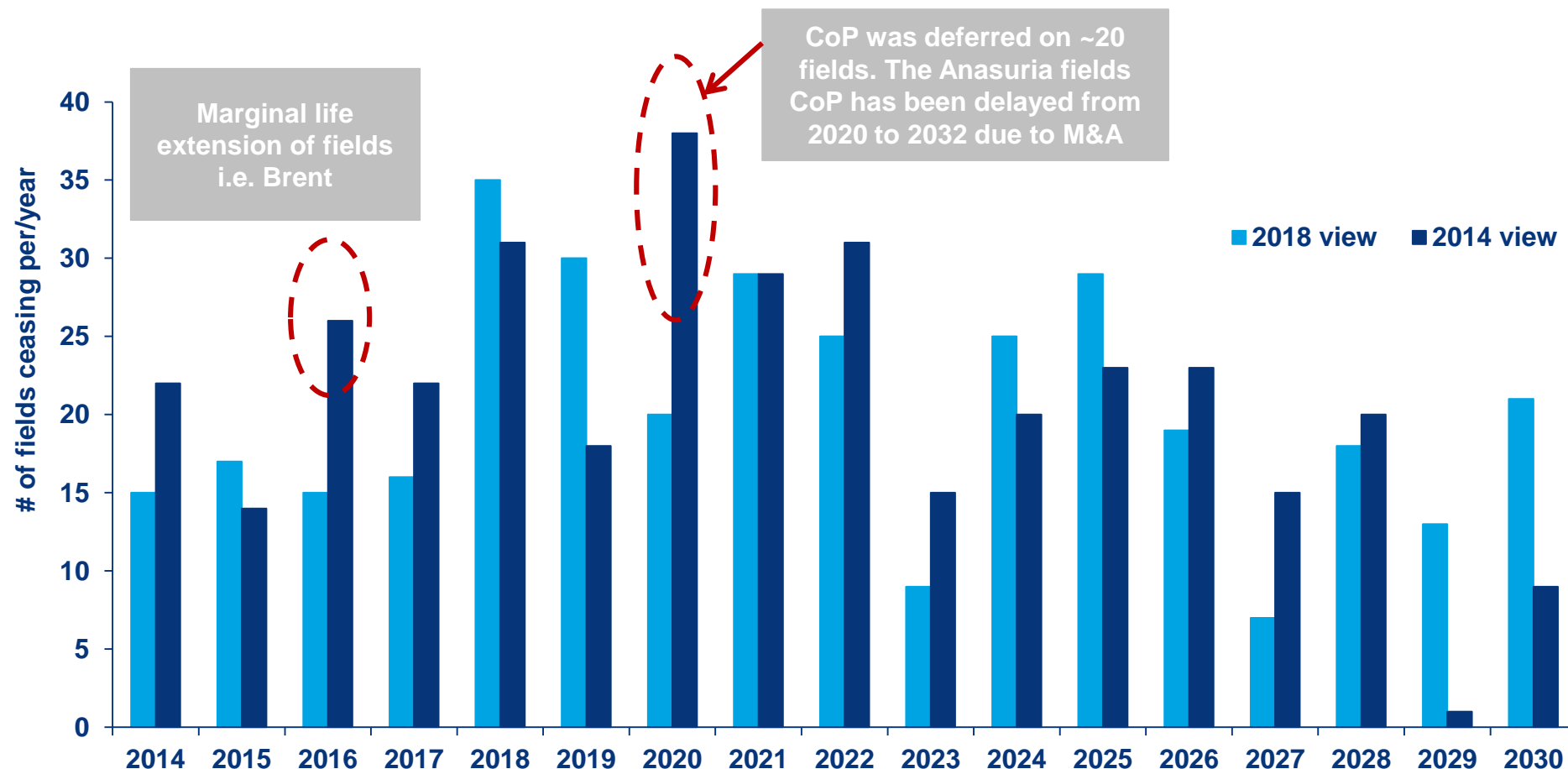
Low reserve replacement



Field cessation timing can be a moving target

A number of factors influence the timing of cessation

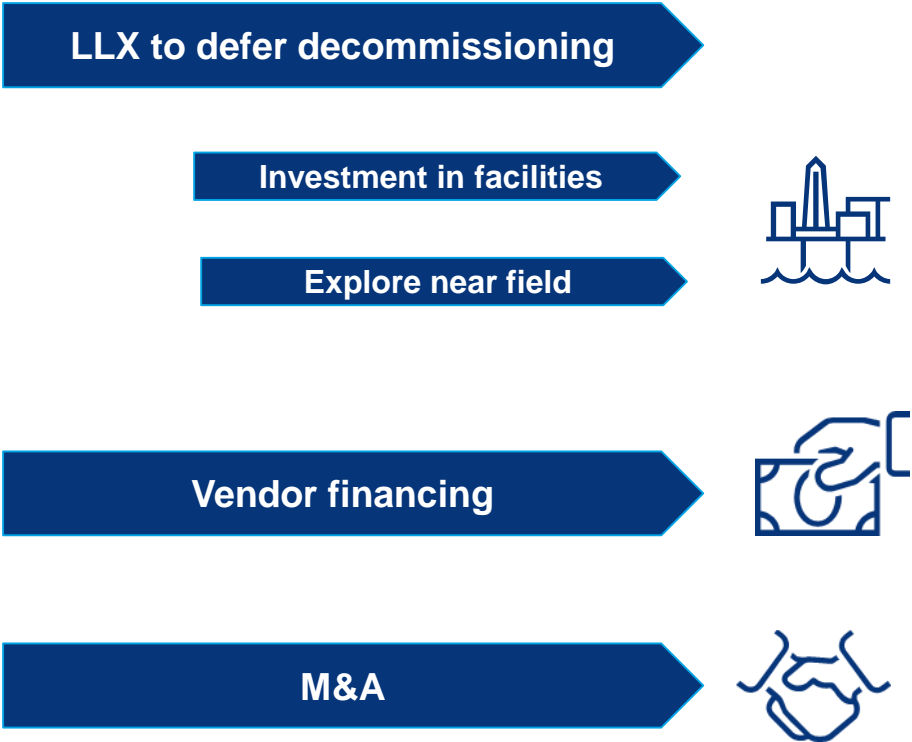
2014-2030 CoPs – 2018 view vs 2014 view



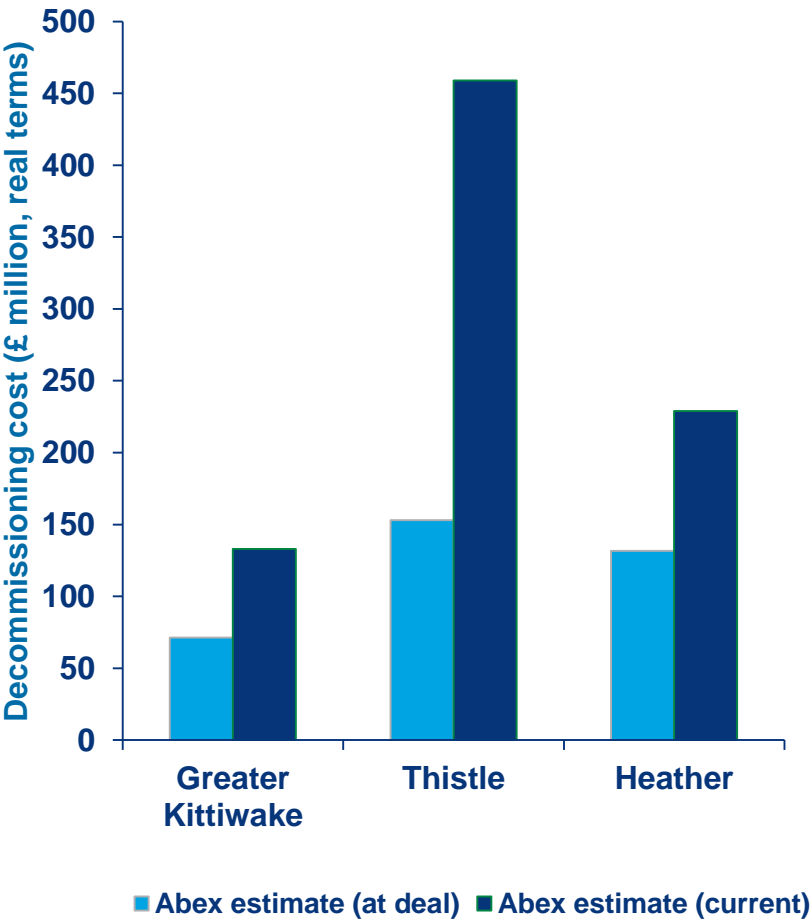
What's next for the industry?

Late-life players are emerging, but it is still early days

How to tackle decommissioning



Previous liability retention deals

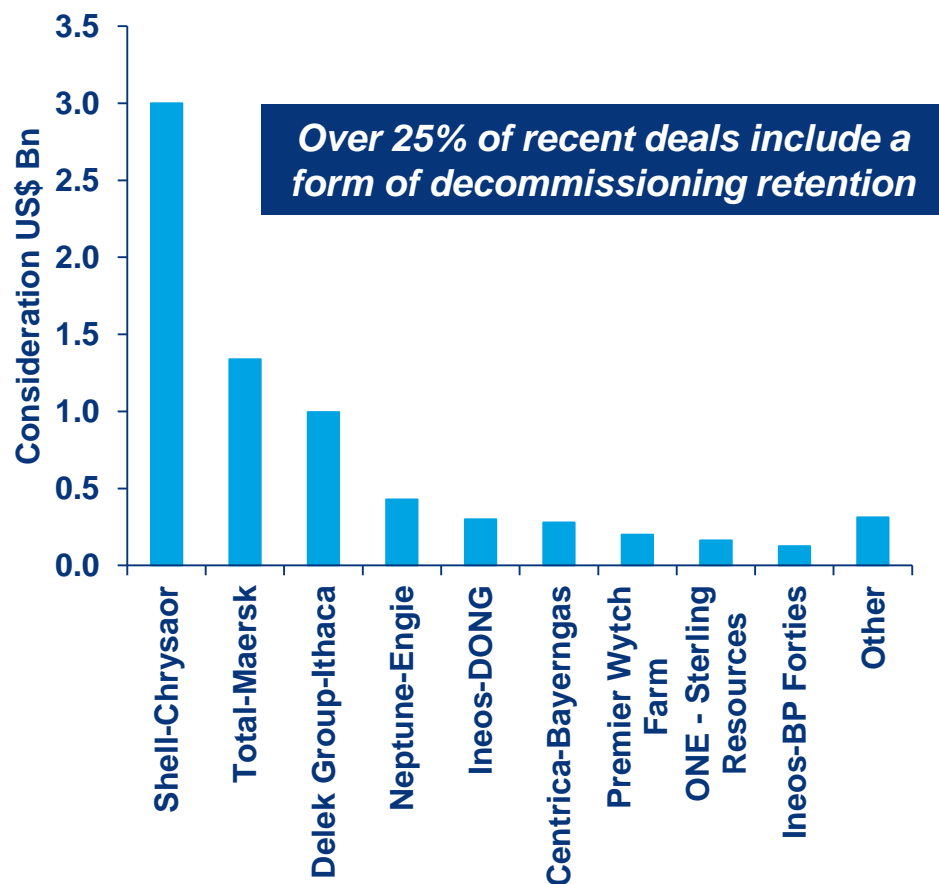




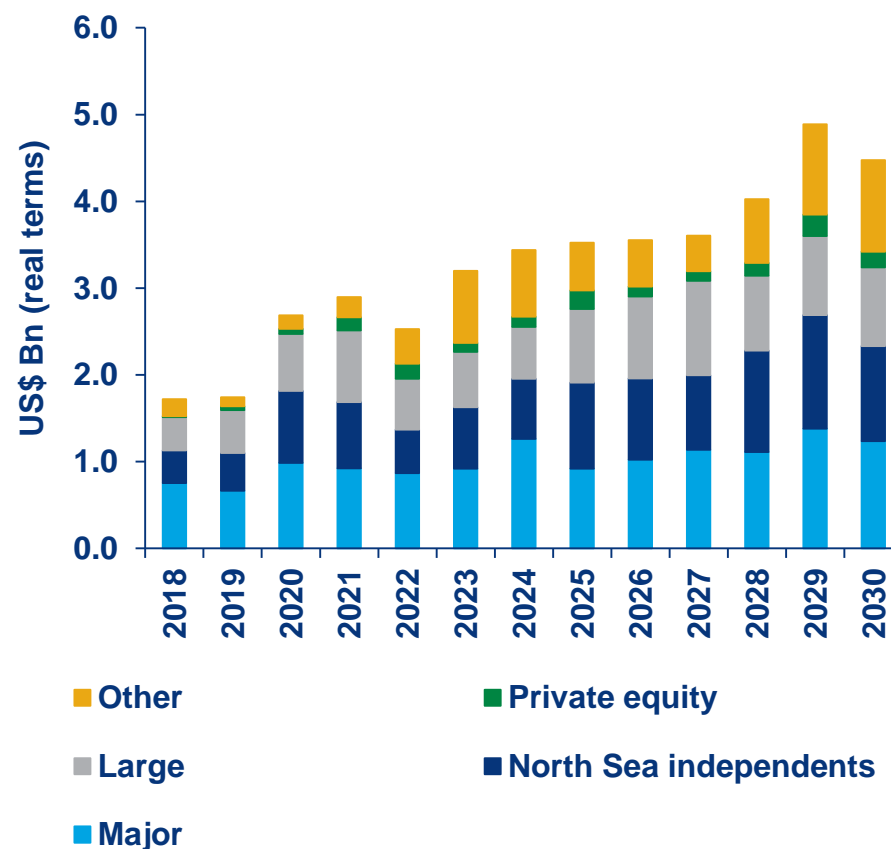
UK M&A was booming in 2017, but did decommissioning liabilities change hands?

The Majors retained US\$2 billion of decommissioning on assets sold last year

2017 UKCS value traded

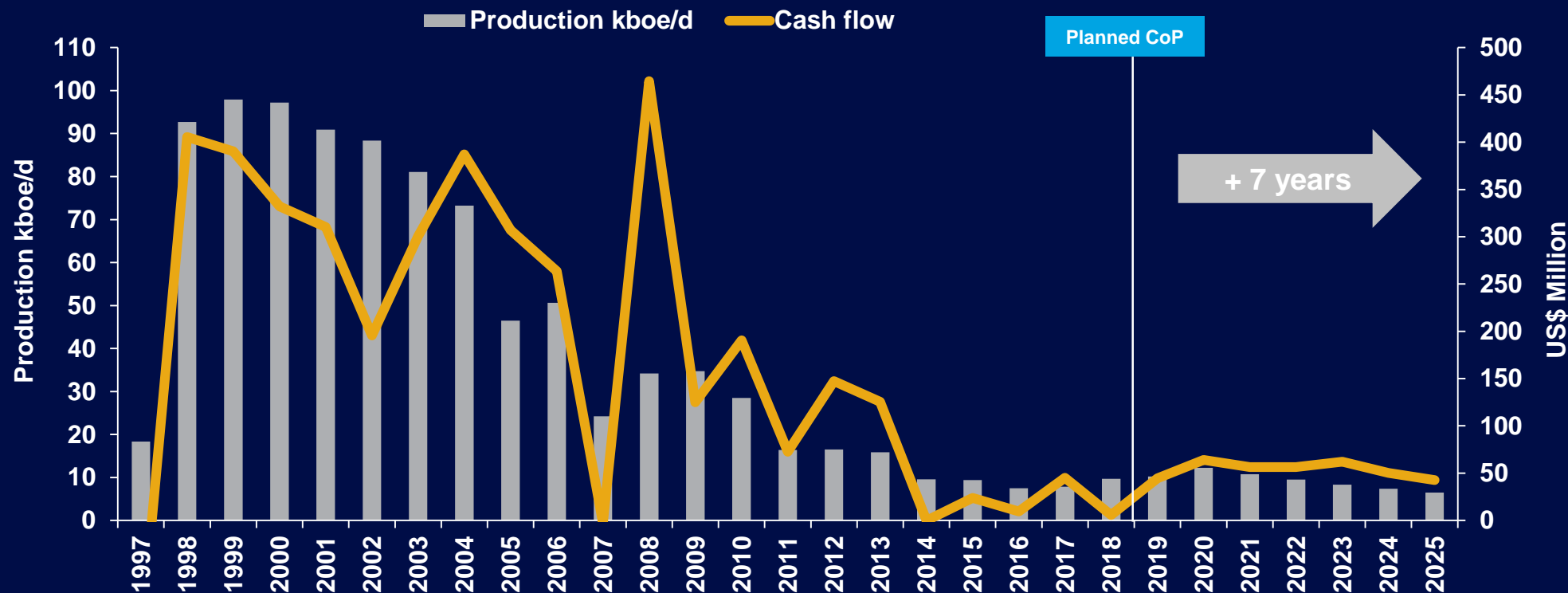


2018-2030 decommissioning spend by company type





Case study: Chrysaor's late life investment in the Armada hub



M&A changes



**+ 25
mmboe**



**- US
\$110M**

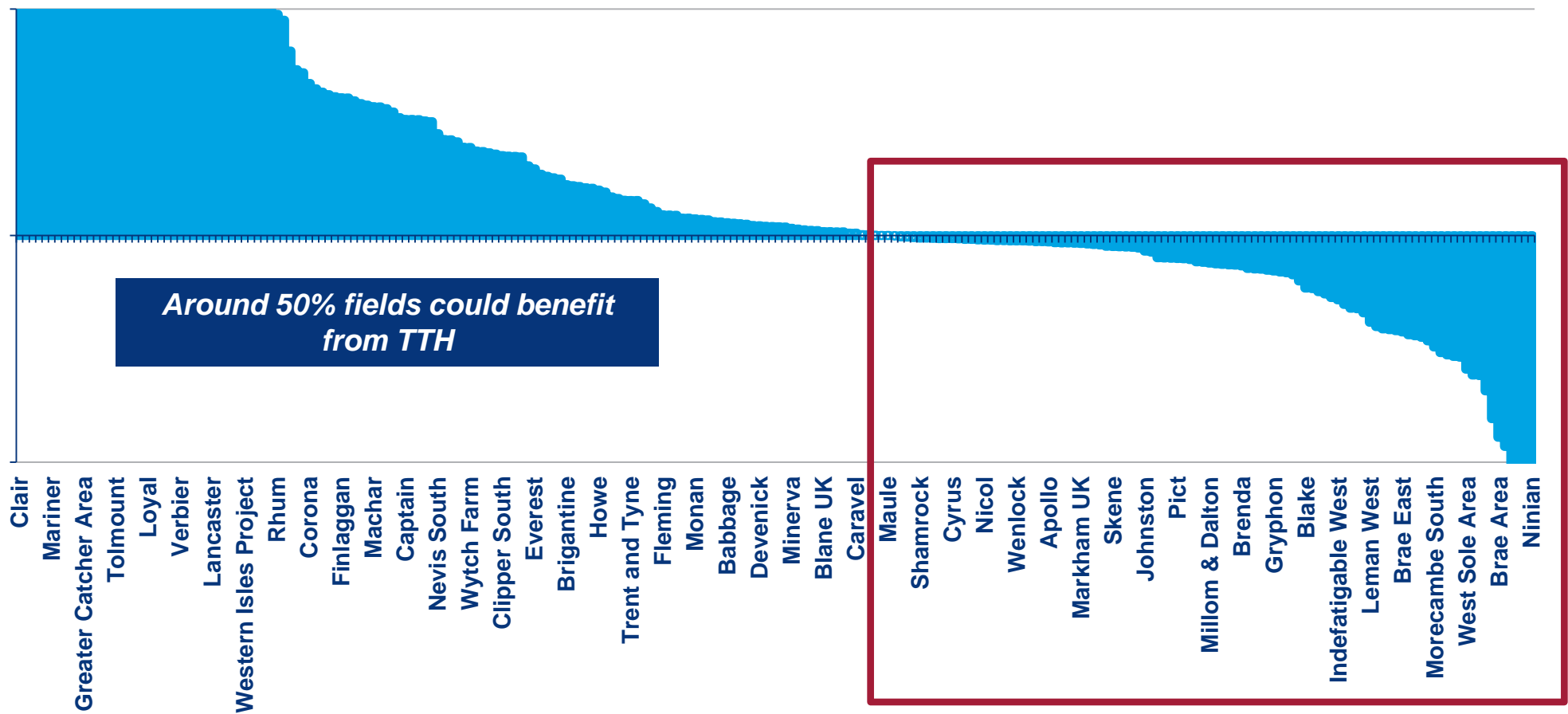


**+ US\$380M
CF**

Introduction of TTH could help move more assets into the right hands

How many fields would benefit?

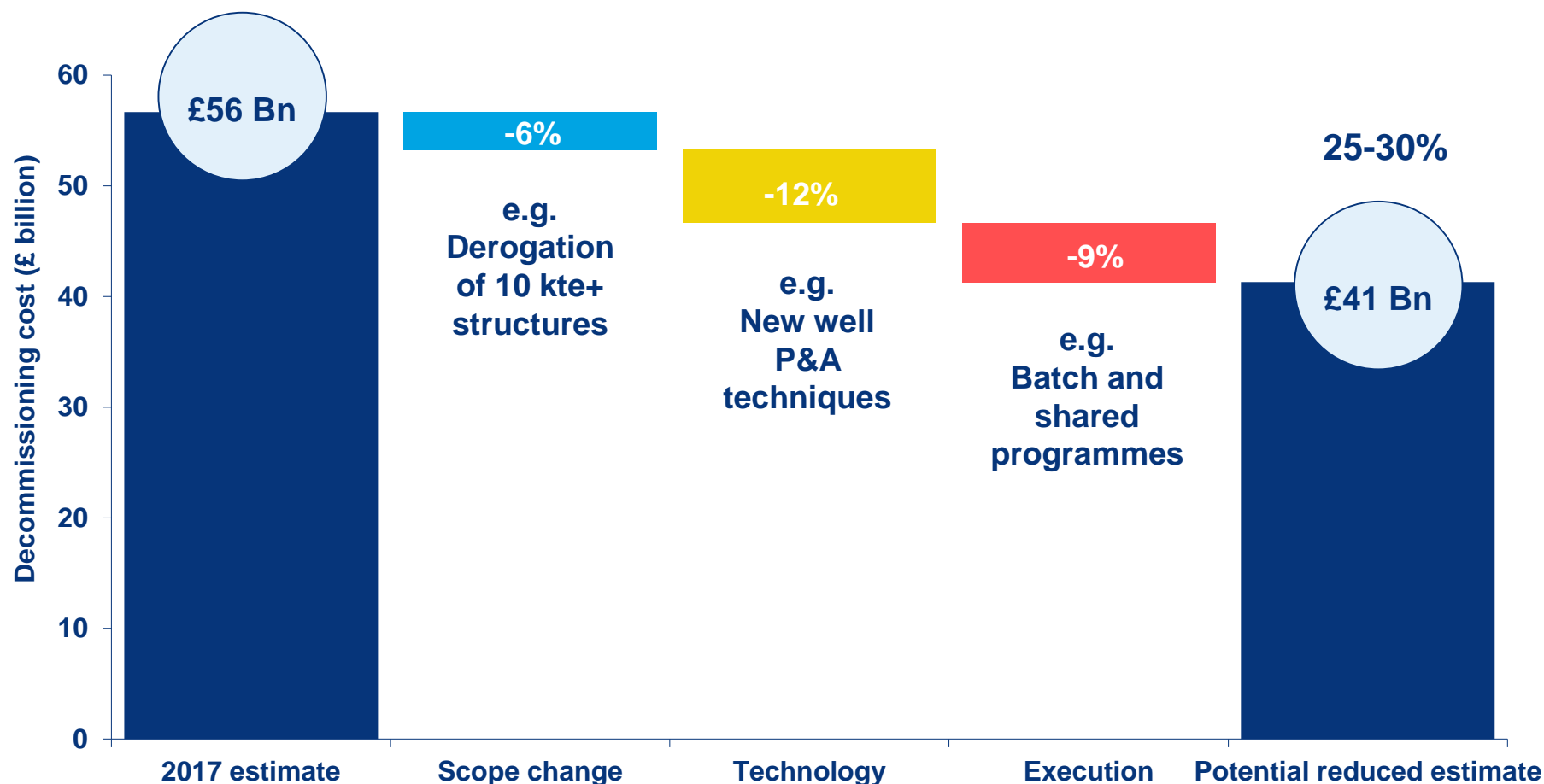
Profit v abandonment ratio for UKCS fields



The opportunity in cost reductions

OGA target of 35% reduction looks ambitious, but achievable. Technology the key enabler

Estimate of potential decommissioning cost reductions by category



Some final thoughts ...

- **The UK is at the forefront of decommissioning**
- **But most activity has yet to take place**
- **There is a huge uncertainty over timing**
- **The M&A market has evolved to help prolong facilities**
- **The industry has made progress on costs – but yet too see clear evidence of sustainability**



Q&A ?

Neivan Boroujerdi

Senior Analyst, North Sea Upstream

Biography

Neivan has been an Analyst in the North Sea Upstream Research team since 2014.

Neivan has authored Insights looking at a variety of topical subjects including the economics of the Southeast Barents, corporate response to the drop in oil price and impact of private equity in the North Sea.

Neivan also carries out consulting projects and presents at conferences. Recent consulting work includes helping companies with long-term strategies, due diligence and project benchmarking.

Prior to joining the Norway Upstream Research team, Neivan worked as an analyst at Interconnector UK carrying out a variety of commercial and regulatory work.

Neivan graduated with a Masters degree in Chemical and Process Engineering from Strathclyde University.

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