UKCS Decommissioning market

Fiona Legate, 28 June 2018
Agenda

1. Where does the UK sit in a global context?

2. What, when and where is activity in the UKCS?

3. Decommissioning, an evolving picture

4. What's next for the decommissioning industry?
Where does the UK sit in a global context?
Have many fields have ceased globally?

Around 500 fields ceased production over the last five years, activity was focused in the North Sea, Gulf of Mexico and Asia Pacific.

Source: Wood Mackenzie
The UKCS has the highest number field cessations globally to 2022

20% of offshore field cessations were in the UKCS between 2013-2022

Where does the UK sit in a global context?

Source: Wood Mackenzie GEM Q2 2018
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

Why is spend high in the UKCS?
- The maturity of the region means decommissioning is a given
- The scale of developments vs the rest of the world drives up removal costs

Source: Upstream Data Tool Q2 2018
What, when and where is activity in the UKCS?
There are around 350 platforms and 3,000 wells to decommission

Southern North Sea has 50% of platforms, and 25% of wells, but these are much simpler to abandon than the large fixed platforms in the Central and Northern North Sea

Platforms by sector

- Brent, Ninian, Cormorant,
- Brae, Piper, Britannia,

Wells by sector

- Subsea wells
- Platform wells

Source: Infield Systems Ltd
Includes operational, installed, planned, shut-in, under construction and under conversion platforms
Production is expected to enter terminal decline from 2019

Decommissioning spend is set to increase y-o-y. Near term spend is focused in the mature Central North Sea and Northern North Sea sectors.

What, when and where is activity in the UKCS?

Source: Wood Mackenzie Upstream Data Tool Q2 2018
Without new investment decommissioning will overtake development spend in 2023

US$42 billion of decommissioning is forecast to 2030 vs US$33 billion of development spend

2018-2030 Decommissioning vs development spend

Source: Wood Mackenzie Upstream Data Tool Q2 2018
Decommissioning, an evolving picture
When is the right time to cease a field?

There are four main reasons to cease a field:

**Types of CoP**

- Economic
- Reservoir
- Infrastructure
- Technical

**CoP timing isn’t always straightforward**

**2016**
- 30% of fields operated at a loss

**2017**
- 7% of fields operated at a loss

**2018**
- 6% of fields operating at a loss

- Opex reduced 50% in 2018 vs. 2014
- Production increase 35% in 2018 vs. 2014

Source: Wood Mackenzie Upstream Data Tool Q2 2018
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

- 30 fields ceased earlier than we expected. Almost half of these were due to poor production performance.
- Eight fields were re-evaluated as ceased. Our 2014 view assumed a restart.
- 18 fields are expected to cease beyond 2030 due to late life investment. 30% of these are due to M&A i.e. getting assets into the right hands.

CoP was deferred on ~20 fields. The Anasuria fields CoP has been delayed from 2020 to 2032 due to M&A.

LLX at three hubs saw CoP deferred substantially vs. 2014: ETAP (BP), J-Area and MonArb Area.

Source: Wood Mackenzie database Q2 2018
Decommissioning, an evolving picture

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

M&A changes

2015

April

2017

January

2018

Mar

+ 25 mmboe

- US $110M

+ US$380M CF

Source: Wood Mackenzie GEM Q2 2018
What’s next for the decommissioning industry?
What's next for the decommissioning industry?

Decommissioning experts are emerging, but it is still early days

How to tackle decommissioning

- LLX to defer decommissioning
- Investment in facilities
- Explore near field
- Divest late life assets
- Technology advances
- Vendor financing

Previous liability retention deals

Source: Wood Mackenzie
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

Source: Wood Mackenzie M&A Tool, Upstream Data Tool Q2 2018
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

- **2017 estimate**
  - £56 Bn

- **Scope change**
  - -6%
  - e.g. Derogation of 10 kte+ structures

- **Technology**
  - -12%
  - e.g. New well P&A techniques

- **Execution**
  - -9%
  - e.g. Batch and shared programmes

- **Potential reduced estimate**
  - £41 Bn
  - -27%

Source: Wood Mackenzie
Q&A
Fiona Legate
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Biography

Fiona is an analyst on the North Sea Upstream Research team. She joined Wood Mackenzie in 2012 and has six years of experience.

Fiona has spoken at a number of decommissioning conferences providing Wood Mackenzie’s market analysis and market commentary. Fiona has also authored several Insights looking at a variety of critical issues impacting on the North Sea including the changing fiscal environment, exploration and decommissioning.

Prior to joining the UK Upstream Research team Fiona worked in the LNG team.

Fiona graduated has a MA Honours in Management with Business Law from Heriot-Watt University. She also holds a MSc in Environmental Law from the University of Edinburgh.

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