Oil & Gas
Authority

MER UK Forum, October 2016

MER UK in Practice

Dr Andy Samuel
Chief Executive

Current context

Oil & Gas Authority

Infrastructure

5,000+ wells
250+ subsea systems
3,000+ pipelines
250 fixed installations

Production (boepd)

2014	1.4 million
2015	1.6 million
2016	1.6+ million

Source – OGA and Oil & Gas UK

Production efficiency

2014	65%
2015	71%
2015 range	30% to 90+%

Source – OGA

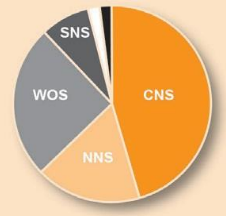
Resources

Source – OGA

Development

6.3bn boe

in production or under development



Source – OGA

Exploration & appraisal

2014 wells	32
2015 wells	26
2016 wells (est)	16 to 19

Source – OGA and Oil & Gas UK

Costs

Unit costs down by nearly 30%

Average unit operating costs have fallen from **£18** per barrel in 2014 to an estimate of **£13** per barrel in 2016

Source – OGA

Supply chain

c.£30bn turnover

80% of UK oil and gas jobs
40% through exports

Source – Oil & Gas UK and EY

Jobs

330,000 jobs in the UK

Delivered through or supported by upstream oil and gas activity

Source – Oil & Gas UK

Delivering MER UK

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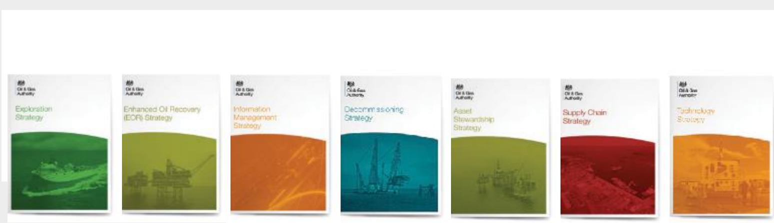
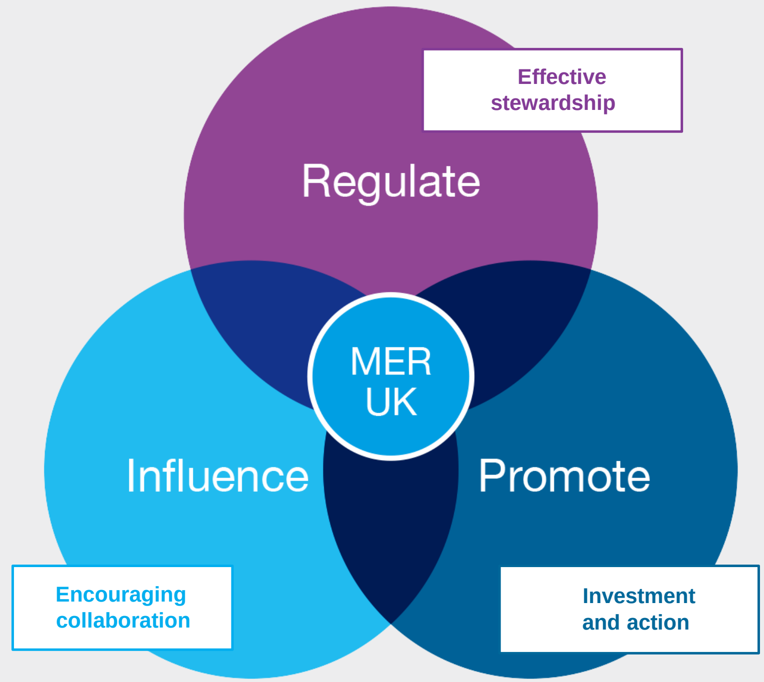
MER UK Strategy

Relevant persons must, in the exercise of their relevant functions, take the steps necessary to secure that the maximum value of economically recoverable petroleum is recovered from the strata beneath relevant UK waters.

Strategic approach



Role of the OGA



1st October: OGA vested as independent government company

Progressive regulation

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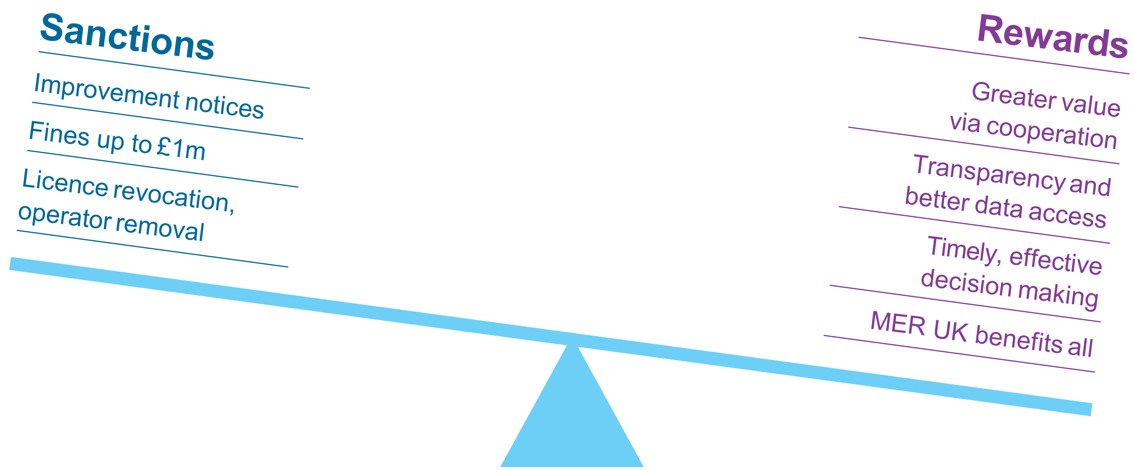
Top 10 - what's changed?	
Third Party Access	Quicker
MER UK Strategy	In action
Asset stewardship	Evolved
Area plans	Evolved
Meetings access	New
Dispute resolution	New
Information & samples	New
Sanctions	New
Decommissioning	New
Innovate licence	New



Our values			
Fair	Considerate	Accountable	Robust

Balanced application of new regulatory framework

Effective influence

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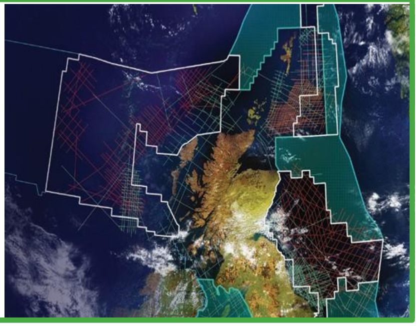
Asset stewardship

- New approach
- Cross-lifecycle
- Supporting performance

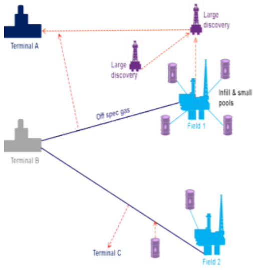
Exploration

- New seismic
- New plays
- More flexibility



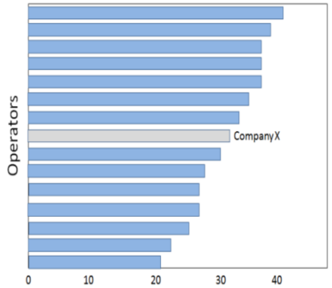
Area plans

- Strategic hubs
- More transparency
- Collaboration & consolidation



Company behaviours

- Measuring performance
- Updated practices
- Changing culture



Changing behaviour and increasing collaboration

Effective influence

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Asset stewardship

Exploration

Area

Celebrating success

Rewarding best practice

Marginal gains

Changing behaviour and increasing collaboration

Promoting investment

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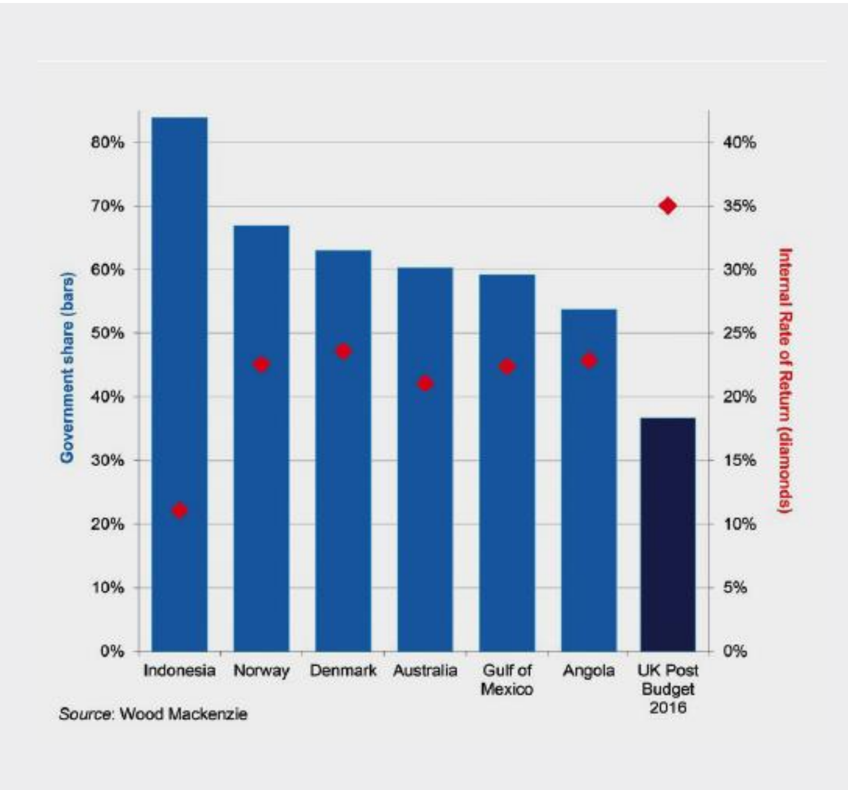
HMT delivered globally competitive fiscal regime



+ Adhere to driving investment plan principles
+ Evidence sought for fiscal barriers to asset transfers

Promoting the UKCS as attractive investment destination
Enhancing the reputation of the UKCS Internationally

Working with FCO, SDI and DIT
Engaging with M&A advisors, investors and others

Proactively positioning the UKCS

MER UK benefits

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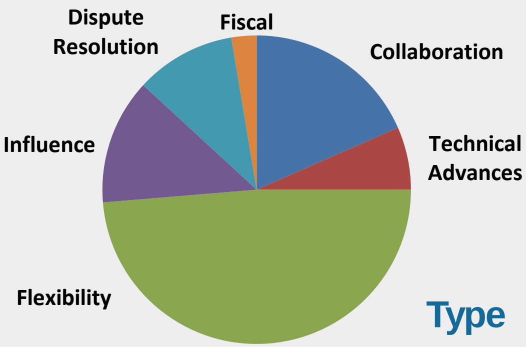
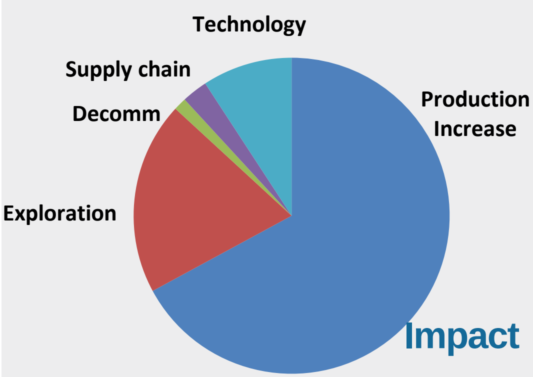
>70 Tripartite successes





Recent examples

Area solutions

ConocoPhillips

REPSOL SINOPEC Resources UK

ITHACA ENERGY

MAERSK OIL

Appraisal drilling

Decommissioning collaboration

Technology solutions

Small pools

Well cost reduction

Asset integrity

Digital & data

Decom

Creating and unlocking MER UK value

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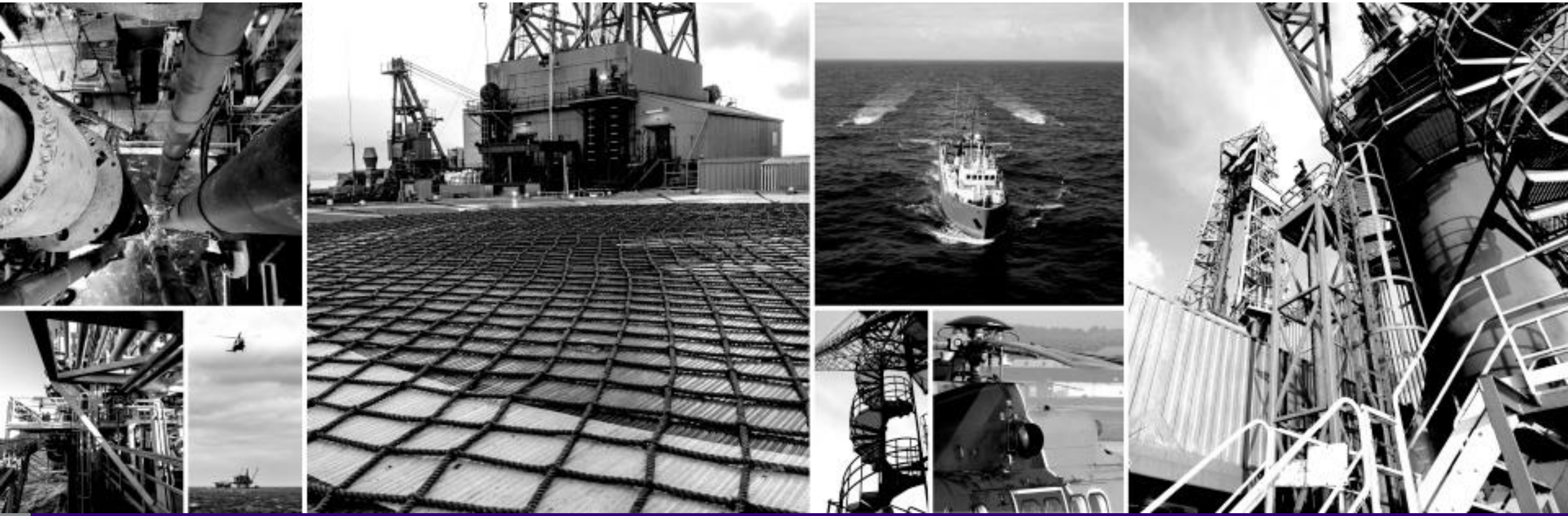
MER UK FORUM

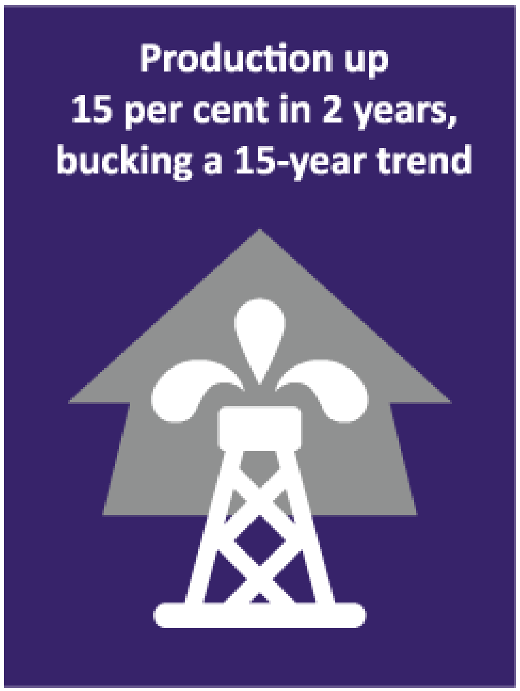
October 16



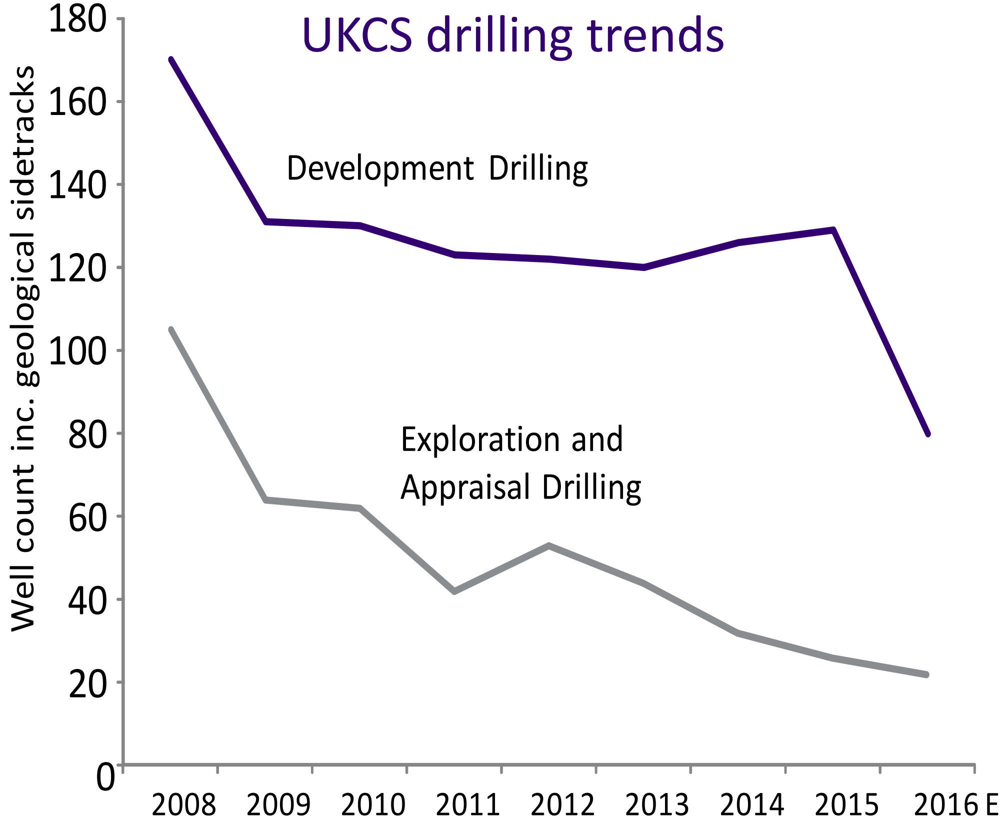
Oil & Gas UK Update - October 2016

1	Industry update/Fiscal Environment
2	Progress on cost and efficiency

Industry performance has improved significantly over the last two years



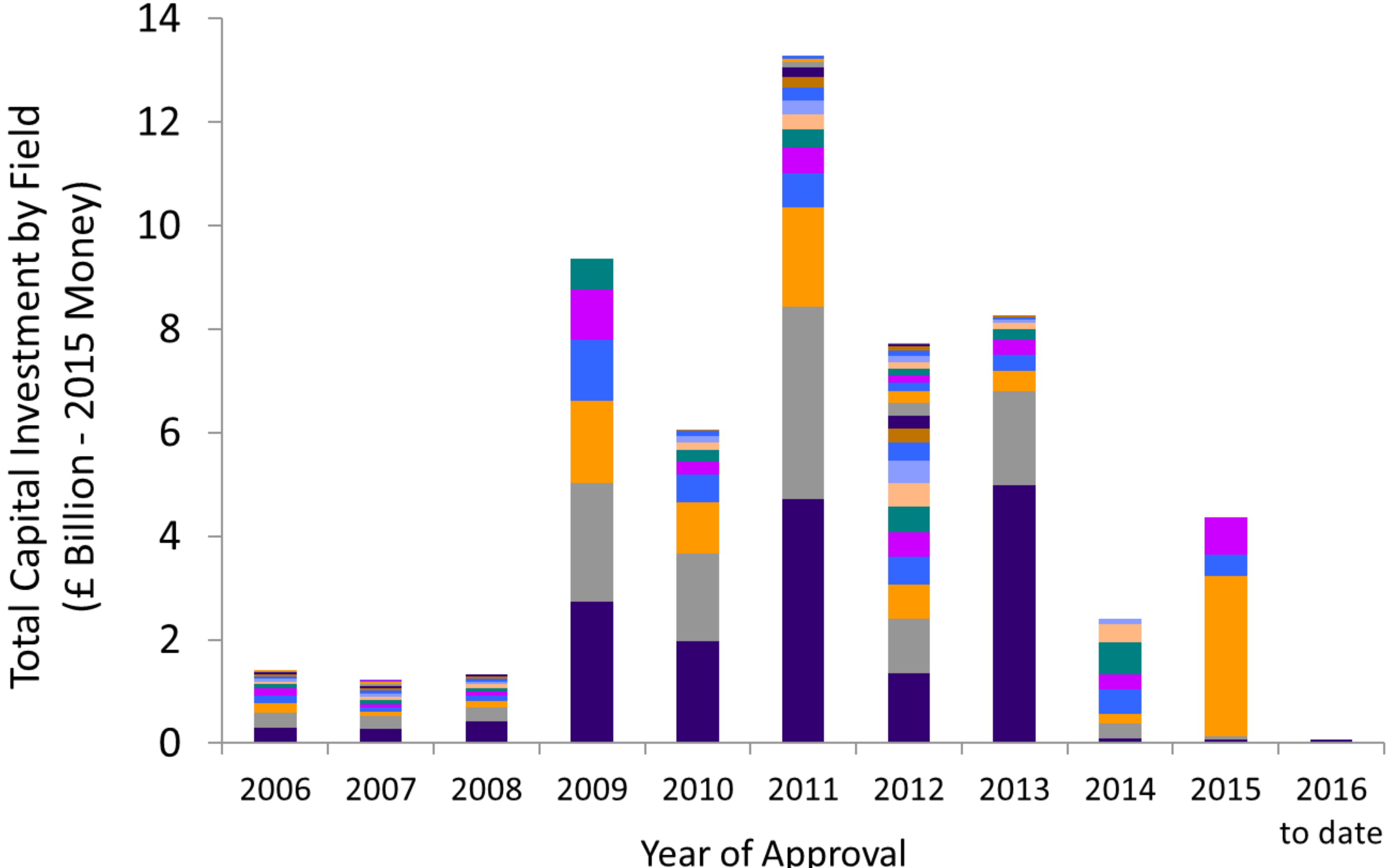
UKCS drilling at 50 year low



- Discovering less than a quarter of current production
- Development drilling down by a third
- 17 rigs stacked
- Skills retention under threat

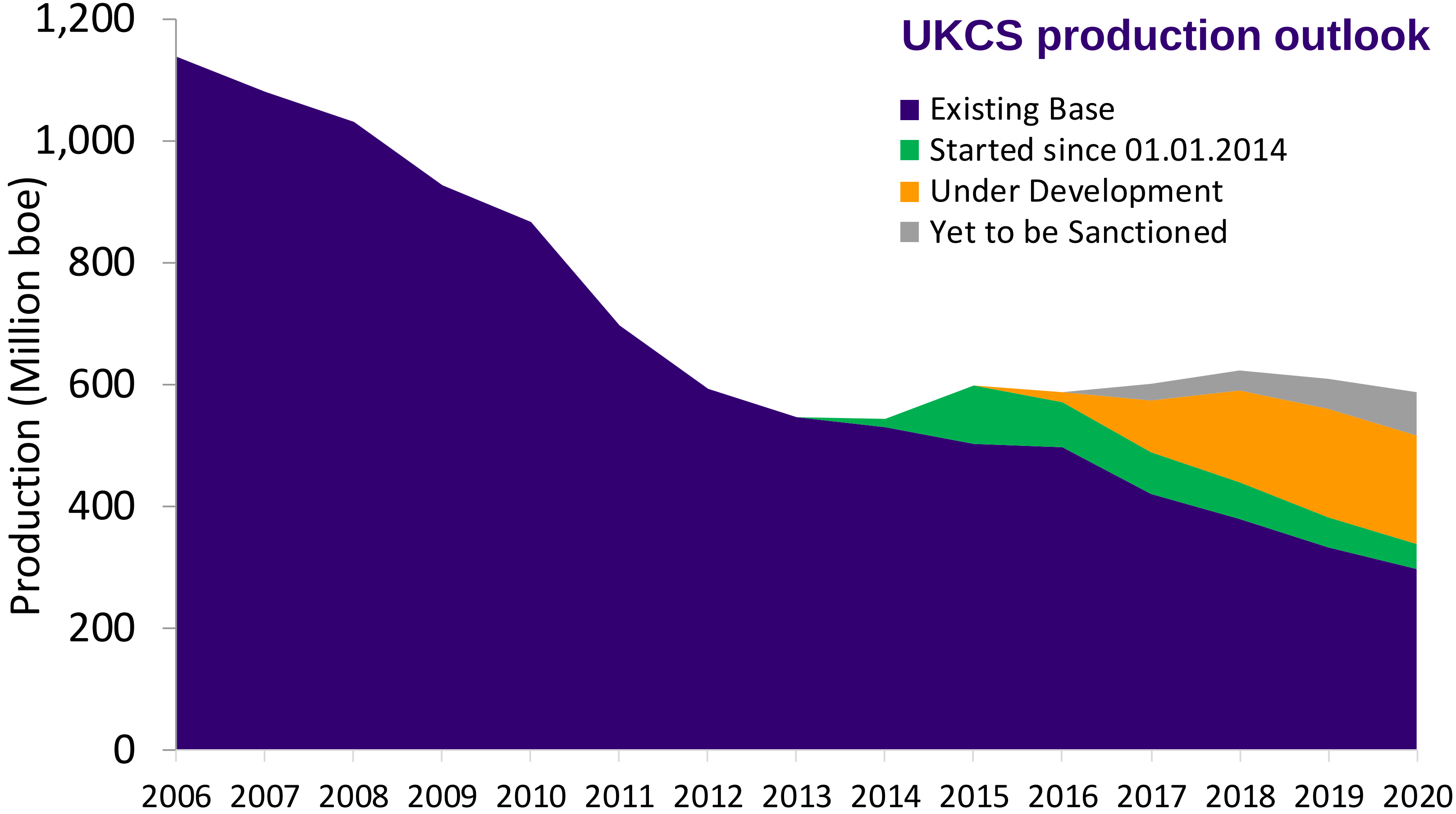
Collapse in new investment a major concern

Capital investment comes almost entirely from pre-2016 commitments:



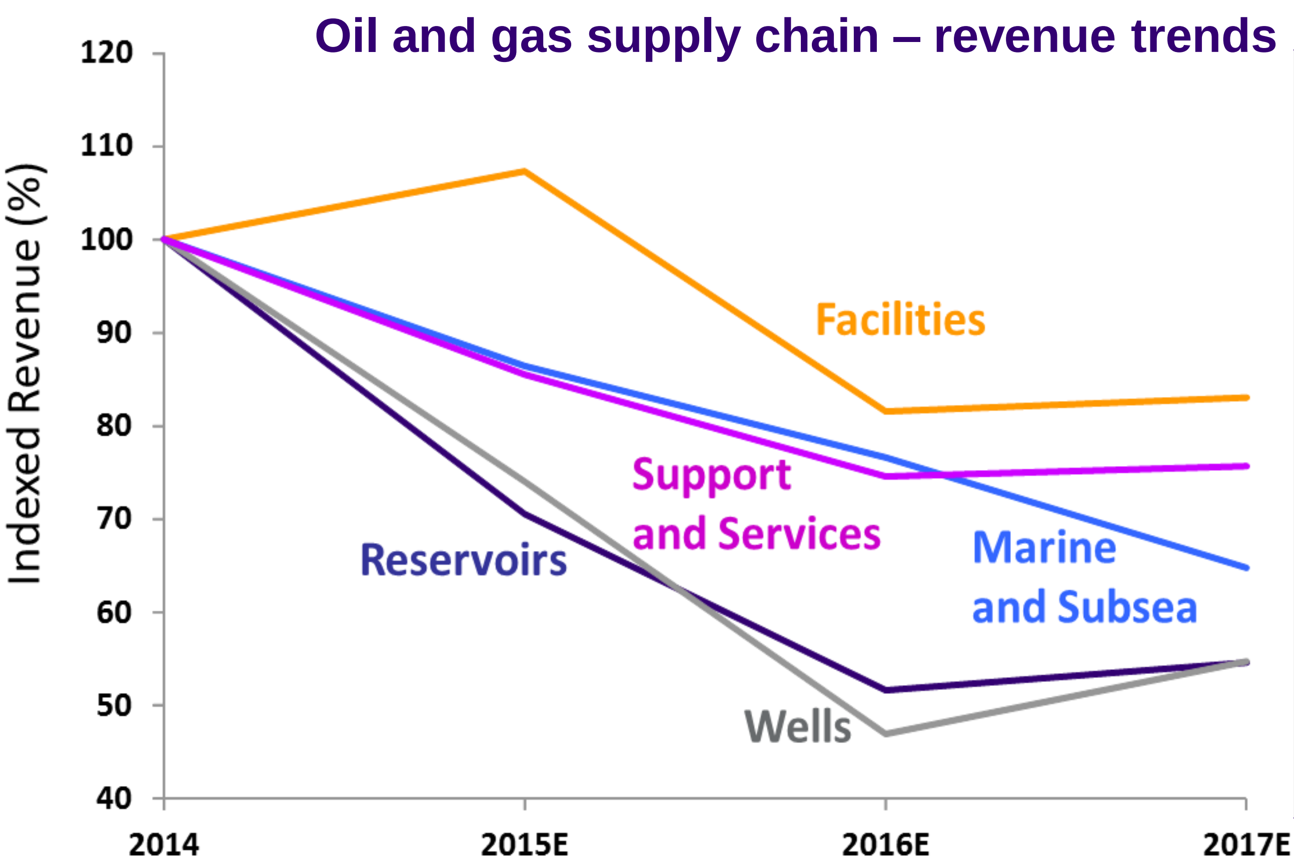
Source: Wood Mackenzie

Production outlook uncertain despite recent strong investment



Source: Oil & Gas UK

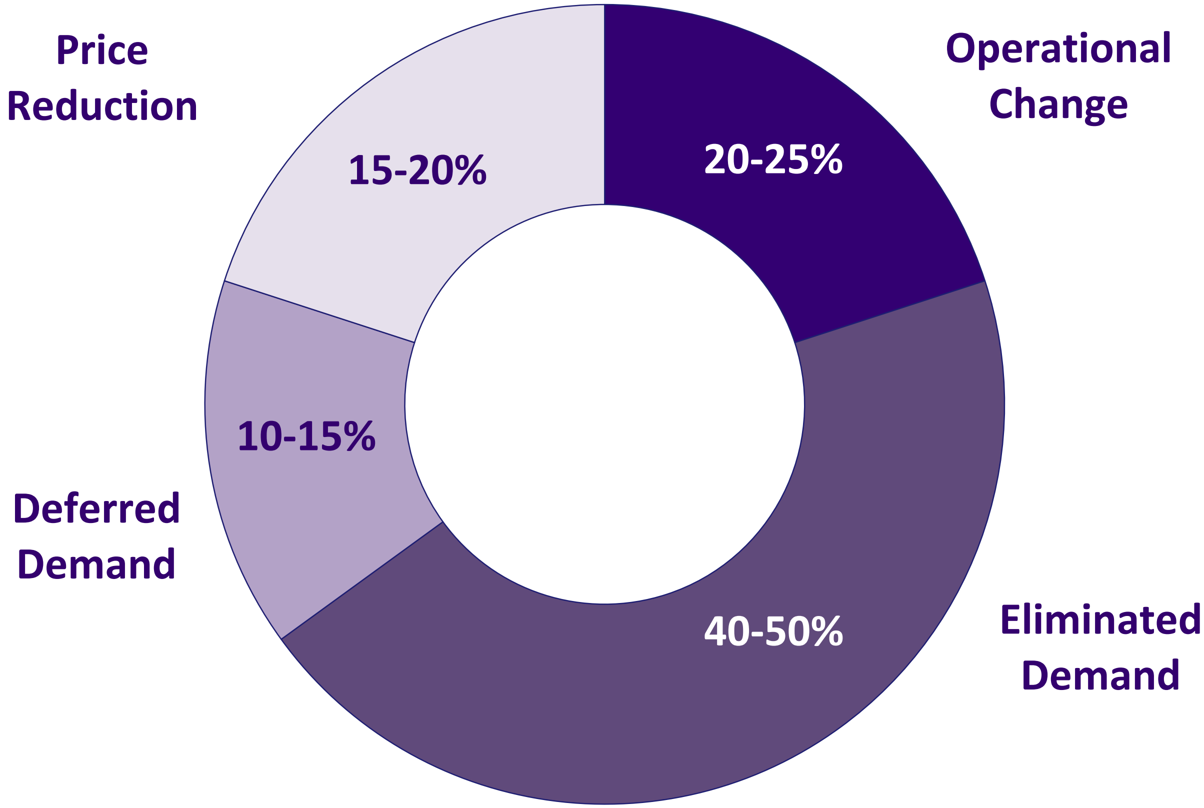
The supply chain is under pressure



> Areas of the business supporting production have held up better than some, but the whole sector faces an uncertain 2017

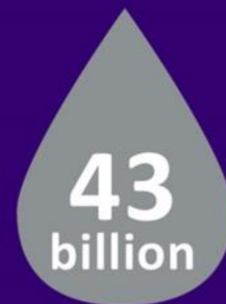
Delivering Sustainable change: UKCS operating expenditure £2.6 bn down in two years

Efficiency trends across UKCS



An industrial success story for the UK

To date the industry has paid more than £330 billion in production taxes to the UK Government



barrels of oil and gas recovered to date

UK oil and gas industry still supports

330,000 jobs

The UK Continental Shelf delivers half the UK's oil and gas

OIL&GAS UK

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Supply Chain, Exports & Skills

Neil Sims
Stuart Payne

31st October 2016

Supply Chain Exports & Skills Board

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Purpose	Work with industry, government and trade bodies to promote and strengthen the supply chain and exports, improving sustainability, local and global competitiveness while anchoring activities in the UK.
Priorities	**1. Maximise the economic potential of the UKCS** **2. Anchor the service sector in the UK** **3. Increase the accessible market share by 2035**
Industry lead	Neil Sims (Expro) — **Support lead**: Stuart Payne (OGA)
Members	Bill Cattanach (OGA) Ali Talput (EnQuest) Ian Jack (SLB) Julian Rippiner (Shell) Mark Docherty (Acteon) Melfort Campbell (ILG) John McDonald (OPITO) Scottish Government Dave Stewart (WGPSN) Mike Pettigrew(Babcock) Terry Savage (Global Energy) Barry Macleod (Bibby) Dave Clark (Aker) Steve Gray (ROVOP) Stuart Broadley (EIC) Richard Male (Diamond) Paul Charlton (NOF) Mark Goodall (East of England) Sandy Hutcheon – (TAQA) Stephen Marcos Jones (O&GUK) Tanya Maycock – (BP) Mike Horgan (AMEC FW)
Key relationships	Paul Drabwell (BEIS) Maggie McGinlay (SE) Craig Jones (DITI) Ken Cruickshank (O&GUK) MERUK Boards especially Skills, Technology & Decommissioning
Progress update	➢ The Board has met 5 times with the 6th meeting planned for December ➢ Four initial priority workgroups have been formed as follows: ○ Exports – target to double the share of global oil and gas market by 2035 ○ New Opportunities – create a market by unlocking stranded investment and building new capabilities ○ Promotion of the supply chain – creating a collaborative environment which will add value to the basin ○ Skills workforce – retain/develop and protect a skilled workforce ➢ Transformational change – Board is setting a transformational agenda and plan ➢ Strategy document and Delivery Programme developed and published October 2016.
Risks / interdependencies	• Strong alignment with other MER UK Boards, government and trade bodies is key avoiding duplication and adding value by promoting and supporting new approaches collaboratively • Insolvency of supply chain companies leading to loss of capability

Supply Chain Strategy & Delivery Programme

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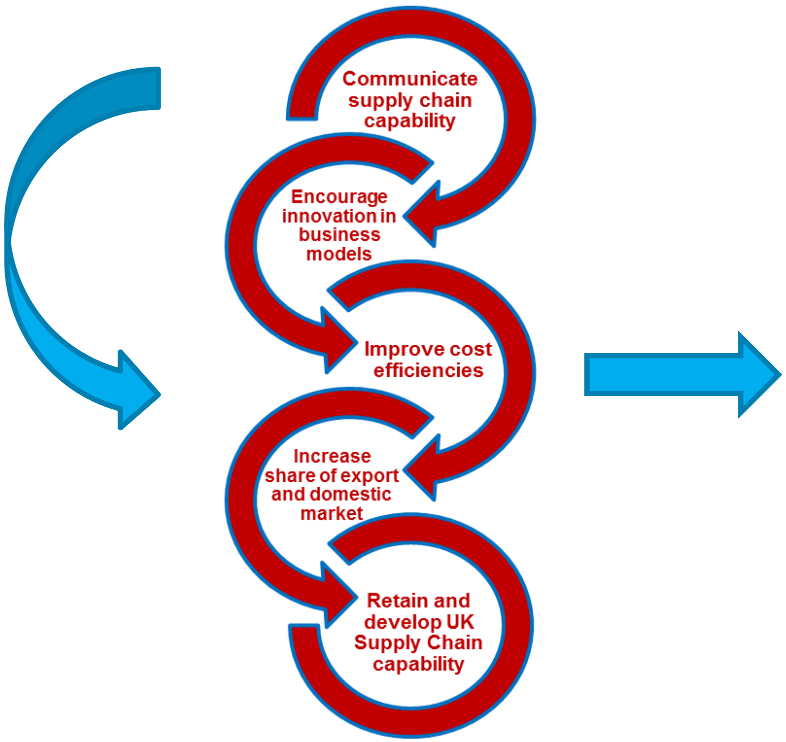
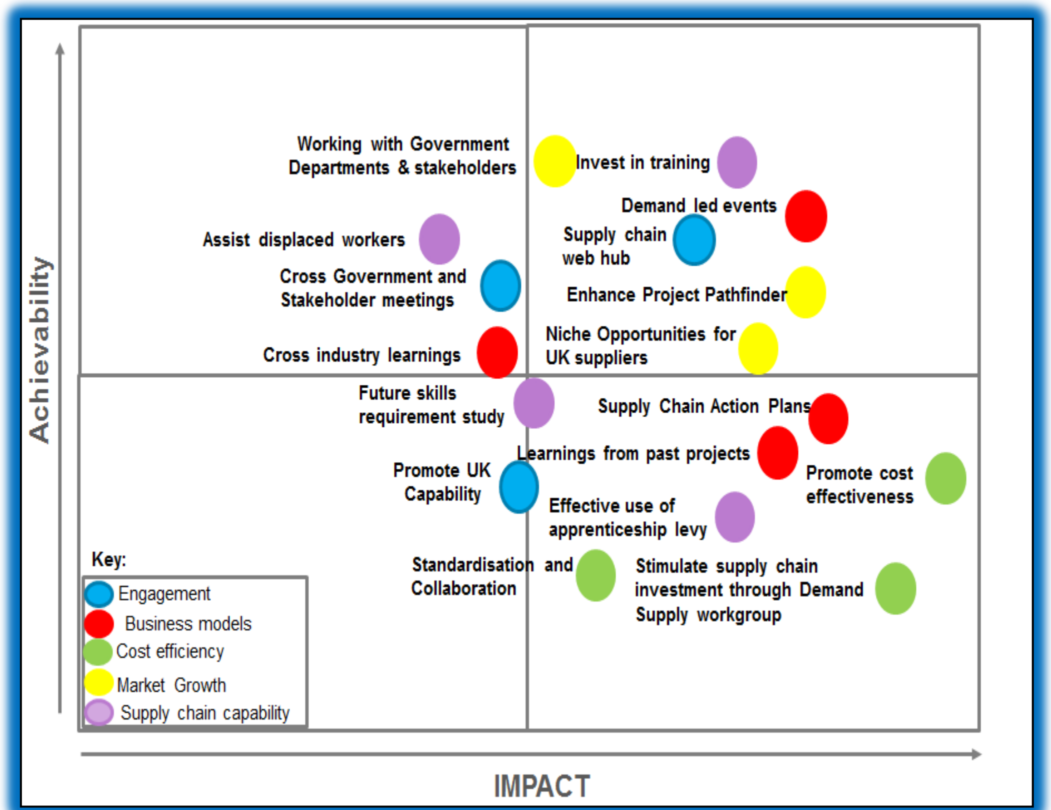
Maximise the economic potential of the UKCS

Anchor the service sector in the UK

Increase the accessible market share by 2035

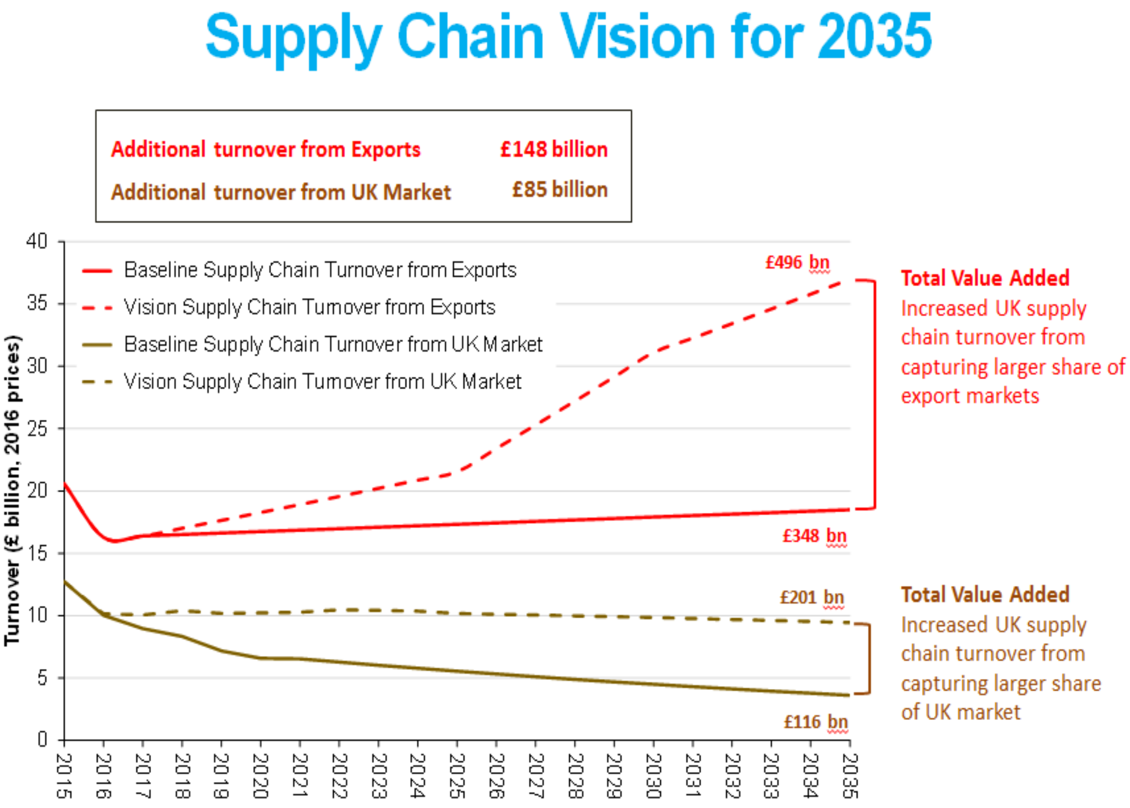




Developing competitive advantage within the UK service sector

Opportunities, Risks & Action Needed

Opportunities



Risks

OGUK figures show "fresh capex" investment expected to be sanctioned in 2016 will be less than £1 billion only 1/8th of the average figure over the last 5 years

The Supply Chain is running out of work in many areas, and facing a potential crisis and loss of capability

Action Needed

Immediate Term: **Generate activity** to get projects "over the line" in order to fuel the service sector

Medium Term: As an industry, we must recognise that drilling is the life blood of the sector, and **drill more wells**

Discussion

Question 1: Much has already been done to support the sector and to generate activity. What **more** could be done, specifically targeted at supporting and sustaining the service sector?

Question 2: Is there anything more that **Government**, **Industry** and the **OGA** could do to contribute to this effort?

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Regional Development & Infrastructure

Gunther Newcombe
Neil McCulloch

October 2016

RDI Board Summary

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Purpose	Deliver strategic & behavioural change to maximise value for UKCS
Draft priorities	• Undertake prioritised regional reviews to mitigate risks and facilitate delivery of opportunities • Building on HMT Infrastructure workstream output deliver an improved infrastructure access plan • Monitor work in TB to reduce well costs & unlock value of discovered undeveloped resources
Industry lead	Paul Goodfellow (Shell)
Support lead	Gunther Newcombe (OGA)
Members	John Warrander (Addax) Cori Loegering (Apache) Mark Thomas (BP) Greta Lydecker (Chevron) Dominic Macklon (Conoco Phillips) Mike Smith (DONG) Neil McCulloch (Enquest) Morten Kelstrup (Maersk) Vince Graham (OMV Pete Jones (TAQA) Elisabeth Proust (TOTAL) Mike Tholen (O&GUK)
Key relationships	• All MER UK Boards (especially Technology Board), OGUK Board & Commercial Behaviors WG
Funding and resources	• OGA support funded from OGA Levy • Members support manpower and incidental costs from own budgets • Operators to provide (ideally) full time staff to undertake prioritised regional reviews with OGA
Risks / interdependencies	• Strong linkage with other core work boards, in particular TB on small pools and well costs, to ensure linkages made where required and avoid duplication and confusion & OGUK Board • Evaluation of key regions is part of a prioritised phased approach which in the short-term, next 3-6 months, operator support as, OGA is currently recruiting these skills and developing capability

OGA collaboration framework

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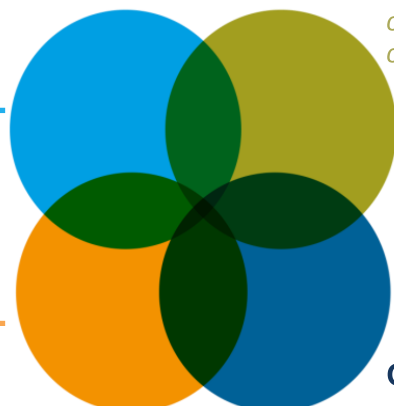
Request industry review and update CCOP and ICOP - benchmark for good commercial behaviours

Expectation that a now better resourced OGA would use CCOP and ICOP and associated simple standards to help industry achieve what they say they want

Reinforce the need for good commercial behaviours via Stewardship Expectations

Stewardship Expectation on collaboration sets out need to have a culture of collaboration coupled with utilisation of collaborative processes



OGA to generate in-house metrics to provide an assessment of company commercial behaviours and behavioural change

This will take the form of quality conversations with individual operators with a scoring process and associated league table

OGA will exercise its powers as appropriate to complement its collaborative function to ensure timely compliance with MER UK Strategy

Regulatory powers and sanctions now in place and application framework developed

Observations

- Wood Review (2014), OGA Call to Action (2015) & Corporate Plan (2016) clear on need to change company commercial behaviours but progress has been slow
- There are great examples of collaboration but OGA often called in or need to facilitate
- Recognition that an Industry Commercial Behaviour workgroup has been set up
- A means of quantifying & benchmarking company behaviour could help facilitate a change in culture

Industry collaboration initiative

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Industry Commercial Behaviour Task Group established

key focus areas being worked:

- Use of standardised agreements (ConocoPhillips led)
- Empowerment of negotiators (Maersk led)
- Timeframe for conclusion of agreements (Centrica led)
- Investing in people & processes (Ithaca led)

Work underway to develop commercial behaviour indicators:

- Potentially extend Deloitte supply chain study of leading indicators
- Use historical data to benchmark agreement timeframes

Update Commercial Code of Practice (CCOP)

Good progress made by Commercial Behaviour Task Group in 2016

North Sea collaboration - maximising value and reserves recovery

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Project: Southern Wye Project
- Connection of Greater Stella Area production hub to Norpipe oil pipeline system
- Tie-in point made available by Janice disconnection programme

Challenge: Fast-track project execution programme required – multiple parties
- <6-month window to plan and execute initial tie-in works during planned 18-day Norpipe 2016 maintenance shutdown – connection of new valve structure to enable subsequent pipeline tie-in
- Operational programme required system-wide involvement of Norpipe shippers/terminal – dis-connection works performed under ambient pipeline isolation conditions

Operators: Ithaca Energy, ConocoPhillips (UK / Norway), Maersk Oil, Repsol-Sinopec
- Cross-party benefits captured through close collaborative working
- Enabled full offshore work programme to be delivered within time constraints, while securing operational synergies and cost savings

Greater Stella Area… securing a long term oil export route for the production hub
- Tie-in solution enabled a more complex and costly hot-tap connection to be avoided
- Pipeline export solution facilitates enhanced production uptime performance and reduces fixed operating costs – maximises reserves recovery and long term value

Collaboration Challenges

- What are they?
- Solutions?
- Next Steps?

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